Chesapeake Bay Critical Area Commission
Department of Housing and Community Development
Peoples Resource Center
Crownsville, Maryland
March 1, 2000

SUBCOMMITTEES

9:30a.m. - 10:30 a.m. Project Evaluation

Members: Bourdon, Cain, Witten, Giese, Goodman, Corkran, Cooksey, Hearn, Graves, Wilde, Olszewski, Jackson, McLean, VanLuven

Mini-Cabins (DNR) Worcester County @ Shad landing State Park	Lee Anne Chandler, Planner
Environmental Education Center Somerset County @Janes Island State Park	Regina Esslinger, Project Evaluation
Playground Crisfield @ Somers Cove Marina	Regina Esslinger, Project Evaluation
Crab Creek Subdivision Redesign	Regina Esslinger, Project Chief Dawnn McCleary, Planner
Pavillion Caroline County @ Martinek State Park	Dawnn McCleary, Planner

10:30 a.m. - 12:00 p.m. Program Implementation

Members: Foor, Myers, Barker, Williams, Wynkoop, Johnson, Lawrence, Duket, Samorajczyk, Bradley

BEA Policies	Mary Owens, Program Chief
City of Fruitland Exclusion	Tracey Greene, Circuit Rider
Growth Allocation Perryville -	Susan Zankel, Planner Mary Ann Skilling, Circuit Rider
Growth Allocation Queen Anne's County Cox Creek Landing	Susan Zankel, Planner

12:00 p.m. - 1:00 p.m. - LUNCH

Chesapeake Bay Critical Area Commission
Department of Housing and Community Development
Peoples Resource Center
Crownsville, Maryland
March 1, 2000

AGENDA

1:00 p.m. - 1:05 p.m.	Approval of Minutes Of February 2, 2000	John C. North, II, Chair

SPECIAL PRESENTATION

1:05 p.m.- 1:25 p.m.	Innovative Approaches To Shore Erosion Control	Claudia Jones, Science Advisor Rob Schnabel, Environmental Systems Analysis, Inc.
1:25 p.m. - 1:30 p.m.	UPDATE: "Distribution of Draft FIDS Guidance Paper"	Claudia Jones, Science Advisor

PROGRAM AMENDMENTS and REFINEMENTS

1:30 p.m. - 1:40 p.m.	A	Refinement/Perryville Growth Allocation	Susan Zankel, Planner Mary Ann Skilling, Circuit Rider
~~1:40 p.m. - 1:45 p.m.~~	B	VOTE/Exclusion ~~City of Fruitland~~	~~Tracey Greene, Circuit Rider~~
1:45 p.m. - 1:55 p.m.	C	Refinement/Queen Anne's Co. Growth Allocation	Susan Zankel, Planner

PROJECT EVALUATION

1:55 p.m. - 2:00 p.m.	D	VOTE Pavillion Martinek State Park/DNR Caroline County	Dawnn McCleary, Planner
2:00 p.m. - 2:10 p.m.	E	VOTE Mini-Cabins Shad Landing State Park/DNR Worcester County	Lee Anne Chandler,Planner

2:10 p.m. - 2:20 p.m.	VOTE Environmental Education Center Janes Island State Park/DNR Somerset County	Regina Esslinger, Project Chief
2:20 p.m. - 2:30 p.m.	VOTE Playground Worcester County Somers Cove Marina, Crisfield	Regina Esslinger, Project Chief
2:15 p.m. - 2:30 p.m.	Old Business	John C. North, II, Chairman
	Update on Chesapeake 2000 Agreement	Lauren Wenzel, DNR
	New Business	

Chesapeake Bay Critical Area Commission
Department of Housing and Community Development
February 2, 2000

The Chesapeake Bay Critical Area Commission met at the Department of Housing and Community Development in Crownsville, Maryland. The meeting was called to order by John C. North, II, Chairman, with the following Members in attendance:

Foor, Dr. James. C., Q.A. County
Bourdon, Dave, Calvert County
Corkran, Bill, Talbot County
Cain, Debbie, Cecil County
Cooksey, David, Charles County
Giese, Wm., Jr., Dorchester County
Setzer, Gary, for J.L. Hearn, Maryland Department of the Environment
McLean, James H., Maryland Department of Business & Economic Development
Witten, Jack, St. Mary's County
Branch, Shirley, for Sam Wynkoop, P.G. County
Lawrence, Louise, Maryland Department of Agriculture
Goodman, Bob, Md. Dept. Housing and Community Development
VanLuven, Heidi, Maryland Department of Transportation
Duket, Larry, Maryland Office of Planning
Williams, Roger, Kent County
Bradley, Clinton, Eastern Shore Member at Large
Graves, Charles C. , Baltimore City
Samorajczyk, Barbara D., Anne Arundel County
Myers, Andrew, Caroline County
Barker, Philip, Harford County
Johnson, Samuel Q., Wicomico County
Olszewski, John Anthony, Baltimore County

Not in Attendance:
Wilde, Jinhee, Western Shore Member at Large
Wenzel, Lauren, Maryland Department of Natural Resources
Jackson, Joseph, Worcester County

The Minutes of January 5, 2000 were approved as read.

Claudia Jones, Science Advisor, CBCAC introduced Mr. Rick Ayella from the Maryland Department of the Environment who gave a presentation on the tidal wetlands maps created in 1972, the tidal wetlands boundary lines, and the procedures to modify the boundary lines The Commission found the presentation to be very informative.

Mary Owens, Program Chief, CBCAC presented for Concurrence with the Chairman's determination of Refinement, the Osborn Property Mapping Mistake in Harford County. She said that Harford County is requesting consideration of a change in the Critical Area overlay designation from RCA to LDA based on a finding of mistake. Ms. Owens explained the technical details of the mapping mistake. She described the property, totaling 6.82 acres, being surrounded by other land uses that do not support the purpose and function of the RCA and said that an annexation has occurred since the time of the original mapping which has further isolated the parcel, disconnecting it from other areas of Harford County's Critical Area and that there is no viable opportunity to create a connection to any existing RCA. The County has concluded that the original mapping was not consistent with the methodology used to designate the land use management areas as specified in the Harford County Critical Area Program where it should have been mapped as LDA to be consistent with the designations of surrounding areas. The Commission supported the Chairman's decision of Refinement based on finding of mistake.

Dawnn McCleary, Planner, CBCAC presented for Concurrence with the Chairman's determination of Refinement, Harford County's request for 6.82 acres of growth allocation to change the Critical Area overlay designation of the Osborn Property from LDA to IDA, subsequent to the prior approval of mapping mistake for this property that has changed the designation of this property from RCA to LDA and conserves Harford County's remaining 6.9 acres of RCA- only growth allocation. Ms. McCleary said that this property is located at the edge of the 1000 foot boundary of the Critical Area with approximately ½ acre located within the City of Aberdeen's Critical Area which has only 50 acres within the Critical Area, most already developed. The City has no Critical Area Program and may be a candidate for exclusion. Because the City has not been mapped, growth allocation is not being requested for the portion of the property within the City. However, should additional growth allocation be needed a second request will be submitted. This change in designation is requested by the property owner who proposes to develop the site. The site is an open field and not forested and there are no known or endangered species located on the property which does not include any areas within the 100-foot Buffer. The County and Commission staff will work with the applicant on stormwater management and the 10% Rule calculations will be submitted as the design evolves. The Commission supported the Chairman's determination of Refinement.

Roby Hurley, Circuit Rider, CBCAC presented for Concurrence with the Chairman's determination of Refinement the City of Cambridge's request to amend their Critical Area Program to correct the burdensome and conflicting language in its Critical Area Program, Section 1, Page 32, Number 2, entitled Amendments in the Critical Area , Amendment Procedures. The language requires a public hearing to be held by the Planning Commission which is a contradiction to their zoning ordinance including the Critical Area zoning ordinance that it does not require a public hearing before the Planning Commission. This revision does not alter the existing ordinance requirement for a public hearing before the Mayor and City Commissioners. The Commission supported the Chairman's determination of Refinement.

Lisa Hoerger, Planner, CBCAC presented for Concurrence with the Chairman's determination of Refinement Council Bill 59-1999 Amending Prince George's County's Subdivision Regulations to allow certain transfers of land between family members and to public agencies outside the normal subdivision process in certain circumstances. Ms. Hoerger explained the details of the proposed language stating that prior to the adoption of this bill, subdivision was permitted without filing a plat providing the subdivision occurred prior to October 30, 1989. A new addition to the County's subdivision regulations permits subdivisions without filing a plat in the instance of property owners whose parcel is both inside and outside the Critical Area, and where the intrafamily transfer of that parcel would be occurring outside the Critical Area portion of that parcel after October 30, 1989. In a subsection requested by the Maryland National Capital Park and Planning Commission to ensure that any conveyances that occur out of the Critical Area to a government institution remain in a restrictive use in perpetuity. She said that the text change is consistent with what is currently allowed in the Prince George's County Critical Area Program. The Commission supported the Chairman's determination of Refinement.

Ren Serey, Executive Director, CBCAC presented for VOTE the required amendment of text for the Buffer expansion and variance standards language in the Program for the City of Annapolis. He said that the Critical Area Act authorizes the Commission to notify a jurisdiction if its adopted program contains a mistake, omission, or conflict with the Criteria or Law and, the Act also states that local project approvals granted under a part of the Program that the Commission has determined to be deficient shall be null and void after notice of the deficiency. Mr. Serey explained the process for the comprehensive review of local programs and stated that the City of Annapolis is delinquent in submitting their program, which was due in 1992. He said that the City was notified over a year ago of deficiencies in their program relating to the Buffer and the standards for granting a variance and new language was drafted to correct the problem. The Commission also recently has been informed that these changes to the City's Program will not be going forward for local approval. At this time, the City has received a project which is subject to these new changes to the Program and it is likely that the project will receive approval and will be difficult to appeal if this proper language is not in the City Code. Mr. Serey discussed the proposed new language. He said that upon

approval of this new language by the Commission, the Commission staff has recommended, in accordance with the Natural Resources Article Section 8-1809, that the City of Annapolis be notified of these deficiencies and request that a program refinement adding the appropriate language to its program be submitted within 90 days. Dave Cooksey moved to approve the text language, and the Commission's authorization of the utilization of the language employed in the Staff Report (***attached to and made a part of these minutes***). The motion was seconded by Jim McLean and carried unanimously. Chairman North stated that a letter will be prepared and forwarded to the Mayor of Annapolis regarding these deficiencies.

Meredith Lathbury Planner, CBCAC presented for VOTE the proposed enhancements by the State Highway Administration to Eastern Boulevard from MD Route 702 to Martin Boulevard. The enhancements are to improve safety and to relieve congested conditions as part of a revitalization effort. She described the technical details of the proposed stormdrain outfalls in the 100 foot Buffer which are needed because of instability and erosion to the drains and for additional capacity. Any vegetation disturbed will be replaced and impervious surfaces in the IDA will be reduced as a result of this project. Pollution will be reduced as a result of the new stormwater management and the reduction in impervious surfaces. The 10% reduction requirement has been satisfied and State and Federal permits have been issued. Dave Bourdon moved to approve the enhancements proposed by the State Highway Administration to Eastern Boulevard from MD Route 702 to Martin Boulevard. The motion was seconded by Bill Corkran and carried unanimously.

Lisa Hoerger presented for VOTE the proposed addition to an existing Cable Headend Facility on Bay Street in Easton by Easton Utilities. The proposed addition cannot be located anywhere else and will impact the 100 foot Buffer to a perennial stream which will require a ***conditional approval*** as found in the Critical Area Commission's regulations for State and local government development. Also requested for approval are two sets of concrete footers that will support two satellite dishes which are within the 100 foot Buffer. Ms. Hoerger described the technical details of the project. The 10% calculations for pollution reduction have been performed and no additional pollution removal is required. There are no rare, threatened or endangered species present on this site and all necessary permits have been obtained. Dave Bourdon moved to approve the proposed addition to the existing Cable Headend Facility on Bay Street in Easton with the two conditions: 1. The applicant shall resubmit any revisions to the plan to the Commission for approval; and 2. The applicant will work with Commission staff regarding mitigation for all impacts that will result to the Buffer, and will coordinate follow-up site visits to monitor the survivability of the planting area as stated in the staff report. The motion was seconded by Bill Corkran and carried unanimously.

Old Business

Commission Counsel Marianne Mason, Esquire updated the Commission on legal matters. She said that she has filed a brief in the Court of Appeals on behalf of the Chairman regarding the Mastandrea case which involves a variance for a brick walkway in the Buffer. The appellant's reply brief is due later on in February and the case will be argued in the May session in the Court of Appeals.

Ms. Mason reported that there will be two variance hearings coming up in February before the Anne Arundel County Board of Appeals.

Ren Serey, Exe. Director, CBCAC reiterated for the Commission that at last month 's Commission meeting, Talbot County submitted a request to change it's Program to allow local officials and the Board of Appeals to make reasonable accommodations to people who qualify as disabled under the Americans with Disabilities Act which was approved as a Refinement to the local program. He reported that subsequent to that Delegate Weir told him that he will submit legislation that will provide local officials with the flexibility to make reasonable accommodations for those who qualify under the ADA. Mr. Serey said that Delegate Weir had received a copy of the Talbot County Bill attached to a letter from Judge North explaining the Commission's actions and he was asked if his bill will be

modeled on the Talbot County Bill. Delegate Weir stated that he may reference the Bill and that he would send it to the Commission before he submitted it. Mr. Serey stated that if the Bill is not almost exactly like the Talbot County Bill that the Commission approved, then his recommendation is that Chairman North make a recommendation that the Bill ought to be like the Talbot County Bill.

New Business

There being no further business, the meeting was adjourned.

Minutes submitted by:
Peggy Mickler, Commission Coordinator

DRAFT GUIDANCE
February 2000

A GUIDE TO THE CONSERVATION OF FOREST INTERIOR DWELLING BIRDS IN THE CHESAPEAKE BAY CRITICAL AREA

DRAFT

DRAFT

A GUIDE TO THE CONSERVATION OF FOREST INTERIOR DWELLING BIRDS IN THE CHESAPEAKE BAY CRITICAL AREA

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EXECUTIVE SUMMARY

The Critical Area Criteria direct local jurisdictions to develop a management program for the conservation of forest areas used as breeding habitat by forest interior dwelling birds and other wildlife species. This document replaces the first Guidance Paper, approved in 1986, by the Chesapeake Bay Critical Area Commission for the conservation of forest interior dwelling bird (FIDS) habitat. Included in this paper is a description of the legal basis for the protection of FIDS habitat, a clarification of the methods used to identify FIDS habitat, and a list of FIDS species occurring in the Critical Area. Six species have been added to the list in the original document bringing it to a total of twenty-five.

The paper explains the concept of forest edge and forest interior and emphasizes the use of the *Site Design Guidelines* from the original paper to conserve forest interior. The paper also contains a method for determining the amount of mitigation that should be required when unavoidable impacts occur in FIDS habitat. The mitigation amount is based in large part of the extent to which the *Site Design Guidelines* are followed and includes direct and indirect impacts to the habitat. Mitigation will usually be creation of FIDS habitat, but may include, in some cases, protection of existing habitat.

Local and regional planning for FIDS conservation is addressed in addition to the site-specific methods that are stressed.

INTRODUCTION

What are FIDS?

Forest interior dwelling birds (FIDS) require large forest areas to successfully breed and maintain viable populations. This diverse group includes colorful songbirds - tanagers, warblers, vireos - that breed in North America and winter in the Caribbean, Central and South America, as well as residents and short-distance migrants - woodpeckers, hawks, and owls. FIDS are an integral part of Marylandﾀs landscape and natural heritage. They have depended on large forested tracts, including streamside and Bayside forests, for thousands of years.

Recent declines

Unfortunately, populations of some forest bird species have been declining during the last 30 to 40 years. According to the Breeding Bird Survey (BBS), a volunteer bird count conducted each June since 1966; there was a 63% decline in neotropical migrants, many of which are FIDS, in Maryland between 1980 - 1989. A census of neotropical migrants in Rock Creek Park near Washington DC from 1948-1988, revealed a drastic decline including the total loss of some species within the park. While the forest and park did not change significantly over that 31 year period, the surrounding landscape became much more urbanized and fragmented (Briggs and Criswell, 1978).

Factors of decline

While a number of factors have contributed to the decline of FIDS populations, including the loss of habitat on wintering grounds and loss of migratory stopover areas for neotropical migrants. the loss and fragmentation of forests on the breeding grounds here in North America appear to play a critical role. Though some regions appear to be heavily forested today, our forests are increasingly fragmented and altered compared with the forests of the late 1800's and early 1900's. Unlike forest clearing a hundred or so years ago, landscape changes today are more likely to be permanent. This forest fragmentation results in both direct and indirect impacts for FIDS by reducing both the quantity and quality of forest habitat available to FIDS.

Forest Fragmentation and FIDS

Forest fragmentation is the whittling away of forest tracts into increasingly smaller and more isolated patches due to housing and commercial development, roads, logging and agriculture. This effect can be seen in Figure 1., a schematic of actual land use changes that occurred near Columbia, Maryland between the early 50's and the early 80's. While some birds such as cardinals and robins thrive in and around fragmented forests, most FIDS such as warblers and vireos require relatively large unbroken forests to live and successfully reproduce.

Forest fragmentation reduces the size of forest patches, reducing the total area of habitat available to birds, and increases the isolation of habitat, reducing the quality of that which remains. Numerous studies have looked at the relationship between forest patch size and isolation and the abundance of bird species present. A study by Robbins et. al. (1989) found that

Figure 1.

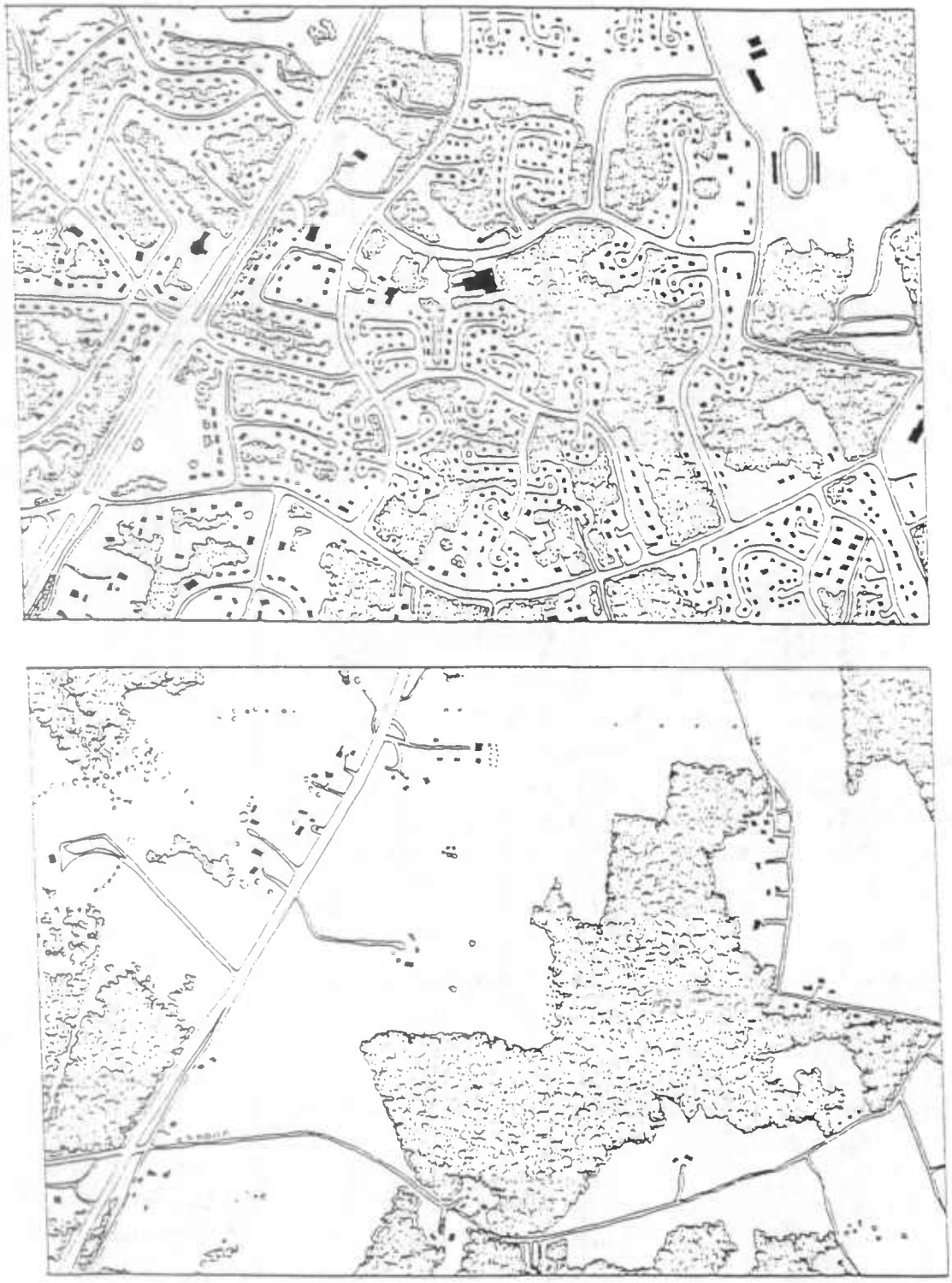


Figure 1. Drawing of actual landscape change between 1952 (top) and the early 1980's (bottom) near Columbia, Maryland. (Based on photograph, Robbins et. al. 1989.) Adapted with permission from the Wildlife Society.

the probability of detecting a particular species of forest interior dwelling bird generally increased as the size of the forest increased, whereas the probability of detecting common non-forest bird species associated with more altered and fragmented forest habitat increased as the forest size decreased. This is demonstrated in the species-area curves for the scarlet tanager and the European starling in Figure 2. Forest fragmentation dramatically reduces the diversity of bird habitat and bird species.

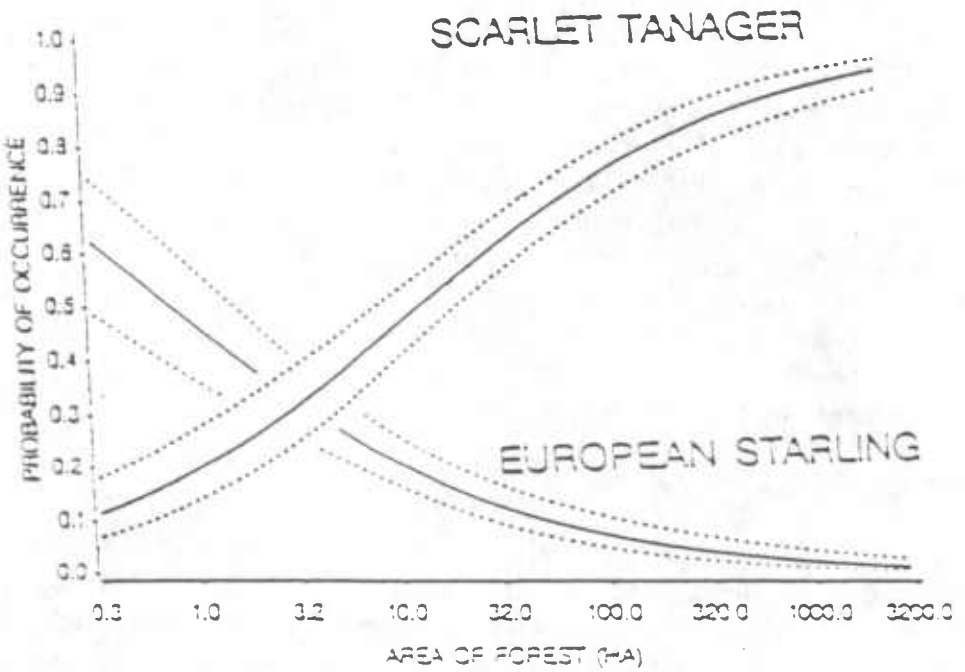


Figure 2. Graph comparing the probability of occurrence by size of forest habitat. Graph shows probability of finding a scarlet tanager (a forest interior dwelling bird species) is higher as the size of forest habitat increases, whereas the probability of finding a European starling (an introduced edge species) decreases as forest size increases. (From Robbins et. al. 1989, adapted with permission from the Wildlife Society.)

Direct Habitat Loss

The direct loss of forest habitat results in smaller forest tracts that may no longer be adequate to accommodate a bird□s territory, to provide an ample supply of food, or to provide the necessary forest structure for breeding. Many forest tracts are too small to support species with large breeding territories such as the red-shouldered hawk, barred owl, and pileated woodpecker. For example, a breeding pair of red-shouldered hawks requires from 250-625 acres to sustain them. Most FIDS, even those species that have small breeding territories, will only select larger forest tracts for breeding.

In addition to area requirements, many FIDS have additional habitat requirements for nesting. Reduction of forest size results in the removal of specialized habitats/microhabitats like streams and wetlands, as well as vegetation type and structure. The vegetative structure (amount of canopy and lower and mid-story vegetation) may be missing or inadequate in smaller forests. Younger, less structurally diverse, and highly fragmented forests cannot support the same variety of plant and animal species that older, more pristine forests can support. For example, Louisiana waterthrush requires nesting habitat near streams and forest swamps in order to build its nests along the banks. The pileated woodpecker requires large snags (standing dead trees) from 100-180 year old trees.

FIDS are generally more successful in large, older, hardwood-dominated forests, however there has been a loss of quality habitat through the conversion of hardwood and mixed-hardwood forests to pine and the reduction of "old growth" forest to small isolated patches. Prior to European settlement it is estimated that old-growth forest covered approximately 95% of the Chesapeake watershed (Kraft & Brush, 1981). Forest coverage in Maryland today is about 44% (USDA Forest Service, 1996) and about 40% of the remaining deciduous forest in the East today consists of small, isolated woodlots of relatively immature trees in agricultural and suburban landscapes. When European settlers arrived in eastern North America in the 1600's, the average height of a hardwood tree was 100 feet or more. The average height of trees in the Chesapeake Bay region today is only 60-80 feet (USDA Forest Service, 1996).

Indirect habitat loss or "edge" effects

Edge effects occur when different habitat types are located next to each other. When considering FIDS, we are concerned about the edge effects on forest when it is adjacent to lawn, agricultural fields, or pasture. A variety of edge effects can adversely impact FIDS depending on the size of the forest, adjacent land use, the amount of forest in the landscape, increase in the penetration of light and wind into the forest, encroachment of invasive plants, and the presence of other competing or predatory edge species.

Forest "interior" refers to the area in the center of a forest. It is surrounded by "edge". In the Critical Area the forest area within 300 feet of a forest edge is considered "edge habitat". "Interior habitat" is commonly defined as the forest area found greater than 300 feet from the forest edge. Interior habitat functions as the highest quality breeding habitat for FIDS. When a forest becomes fragmented, areas that once functioned as interior breeding habitat are converted to edge habitat and.

Higher rates of nest predation occur in forest edges. In addition, forest edges provide access to the interior for avian predators such as blue jays, crows, crackles and mammalian predators that include fox, raccoon, squirrel, dogs and cats. These predators attack nests, eggs, and young birds. They tend to be abundant near areas of human habitation and can be detrimental to nesting success. For example, domestic house cats are estimated to kill 3-4 million birds each day in the United States.

Neotropical migrants are particularly susceptible to brood parasitism by brown-headed cowbirds. Before the 1900's, the cowbird was largely absent from Eastern forests, occurring primarily in the grasslands west of the Mississippi. Pasture land, agricultural fields, and suburban lawns are prime

feeding habitat for cowbirds. When these grassy areas fragment forests, cowbirds can be abundant and have dramatic impacts on breeding success of FIDS. Cowbirds lay eggs in the nests of a variety of birds and the eggs usually hatch ahead of the host's eggs. The young cowbirds develop rapidly and are usually larger and more aggressive than the host's young, taking more than their share of food and often kicking unhatched eggs of the host species out of the nest. Long-distance migrants are more vulnerable to predation and parasitism than resident birds because of their limited breeding season. The migrant species often only have time to produce one brood once they arrive on the breeding grounds and before the fall migration to the south.

The forest edge is exposed to more light and wind than the interior of the forest resulting in a change in moisture and vegetative composition. Small and fragmented forests tend to be drier and to have less leaf litter. Leaf litter is an important component for maintaining arthropod (i.e., insects, spiders) populations for hungry birds. Neotropical migrants in general feed almost exclusively on insects while on their Maryland breeding grounds. In addition, increased densities of deer in many of our forests result in loss of plant diversity and structural diversity from overgrazing on the forest floor and in the midstory. Invasive plants such as Japanese honeysuckle and English ivy encroach into smaller forest fragments, limiting the growth of native plants and stifling natural succession.

Loss of winter habitat and migratory stopovers

The decline in neotropical migrant species may be due in part to the loss of forest in their winter habitat in the tropics and along migratory routes. These small birds may travel a distance of one thousand miles or more over several days to a week. Providing for the needs of these birds, in addition to keeping adequate areas for breeding, also means conserving the native vegetation that provides both the food needed for refueling and cover from predators during migration. Removing understory vegetation in our yards and parks eliminates plants that provide crucial food and cover for migrant songbirds. Another concern about neotropical migrants is the large-scale loss of wintering habitat in the tropics, as forest is converted to agricultural fields and pasture.

FIDS as Umbrella Species

Forest birds are valued for their diverse beauty, distinct songs and behavioral characteristics, and, for the migrants, the wonder of their seasonal journeys. Over 63 million Americans consider themselves to be birdwatchers. FIDS also act as an "umbrella species" for the entire range of forest benefits. The eastern deciduous forest is more than a group of trees. It is an ecosystem of plants and animals that has evolved over thousands of years. In addition to providing habitat for numerous species of wildlife, forests help to protect our watersheds from pollution and have a major effect on the stability of the world climate by absorbing carbon dioxide and releasing oxygen. Diversity in bird species is a good indication of the quality, diversity, and benefits found from forest habitat overall.

FIDS are an important component of a natural forest system. The habitat needs of FIDS overlap those of many other plant and animal species including large mammals, many wildflower species, wood frogs, and wild turkey. When sufficient habitat is protected to sustain a diversity of forest birds, other important components and micro habitats of the forest will benefit and be protected. Such as the small forested streams and headwaters critical for fish populations and the vernal pools necessary for the survival of amphibians.

Forest birds are also an important link in a complex food web. Warblers and other insectivores eat untold numbers of insects such as spruce budworms and caterpillars, helping to keep these defoliators in check (Yahner, 1995). Migratory birds journey north from points far south to breed due in part to the abundance of insects in North America in the spring. Without healthy populations of birds, these insects would consume significantly greater quantities of greenery.

The guidance that follows provides a way for land owners, developers, and local governments to conserve this suite of birds and the forests on which they depend.

CRITICAL AREA PROVISION FOR FIDS HABITAT PROTECTION

The Chesapeake Bay Critical Area Program was established in 1984 with the passage of the Critical Area Act. The law mandated the development of regulations (Critical Area Criteria) by the Governor-appointed Critical Area Commission. Based on goals set forth by the Act, minimum requirements were developed to protect water quality, conserve plant and wildlife habitat, and direct growth and development. These requirements are implemented through 61 county and municipal Critical Area Programs.

One of the requirements of the Criteria is the protection and conservation of breeding habitat for forest interior dwelling birds (FIDS). Specifically, the Criteria instruct local jurisdictions to develop Critical Area Programs to:

> *Protect and conserve those forested areas required to support wildlife species identified above in §C(2)(a)(iii) and (iv)* [these regulations refer to riparian forests and large forest tracts, respectively; see below "What is FIDS habitat"], *by developing management programs which have as their objective, conserving the wildlife that inhabit or use the areas. The programs should assure that development activities, or the clearing or cutting of trees which might occur in the areas, is conducted so as to conserve riparian habitat, forest interior wildlife species, and their habitat. Management measures may include incorporating appropriate wildlife protection elements into forest management plans, and cluster zoning or other site design criteria which provide for the conservation of wildlife habitat. Measures may also include soil conservation plans that have wildlife protection provisions appropriate to the area defined above, and incentive programs which use the acquisition of easements and other similar techniques (COMAR 27.01.09.04C(2) (b)(iv)).*

The Criteria identify two FIDS habitat types for which conservation is mandated:

> *(1) Existing riparian forests (for example, those relatively mature forests of at least 300 feet in width which occur adjacent to streams, wetlands, or the Bay shoreline, which are documented breeding areas) (COMAR 27.01.09.04C(2)(a)(iii));*
>
> *(2) Forest areas utilized as breeding areas by forest interior dwelling birds and other wildlife species (for example, relatively mature forested areas within the Critical Area of 100 acres or more, or forest connected with these areas) (COMAR 27.01.09.04C(2)(a)(iv)).*

Both definitions give <u>examples</u> of habitat sizes: riparian forests 300 feet or wider, forest tracts 100 acres or larger. Smaller forested areas may support FIDS depending on the characteristics of the forest tract and surrounding landscape and FIDS habitat may be absent in forests larger than 100 acres. Therefore, in addition to considering the acreage of a forest when identifying potential FIDS habitat, forest characteristics like forest age, shape, forest edge to area ratio, vegetative structure and composition, topography, and degree of human disturbance should be taken into consideration as well as the character of the surrounding landscape, including proximity to large

forested areas, percent of contiguous forest in surrounding area, habitat quality of nearby forest tracts and adjacent land uses.

The following steps are recommended for local jurisdiction to develop, adopt and implement a FIDS protection element into the Critical Area Program:

1. Identify forest areas that are potentially breeding habitat for FIDS.

2. Incorporate FIDS habitat and forest protection into long-term planning efforts.
   - identify growth areas outside of large contiguous forested areas
   - evaluate zoning of forested areas during comprehensive planning
   - identify opportunities for conservation protection of forest (i.e. Rural Legacy, public lands)

3. Incorporate FIDS habitat and forest protection into subdivision and zoning ordinances and site plan review.
   - adopt conservation site design standards into zoning and subdivision ordinances including provisions for mitigation when impacts are unavoidable

FIDS OCCURRING IN THE CRITICAL AREA

Twenty-five species of Forest Interior Dwelling Birds potentially breed in the Critical Area (Table 1; Stewart and Robbins 1958, Iliff et al. 1996, Robbins and Blom 1996). The majority are small songbirds such as warblers, vireos and flycatchers. Others include the Barred Owl, Whip-poor-will and several hawk and woodpecker species. Twenty of the 25 species are neotropical migrants that nest in temperate North America in the spring and summer and winter in Central and South America.

Although each species is associated with a particular set of forest conditions, all require relatively large, unfragmented forest blocks located within heavily forested landscapes or regions to successfully breed and maintain viable populations. Thirteen of the 25 species are *highly area-sensitive*, seldomly occurring in small, heavily disturbed or fragmented forests. Highly area-sensitive species are most vulnerable to forest loss, fragmentation and habitat degradation. They are generally rare or uncommon on the Maryland Coastal Plain and have highly specialized breeding habitat requirements. The presence of one highly area sensitive bird species nesting in a forest during the breeding season is an indicator of high-quality FIDS habitat. A forest that supports populations of six or more of these species is considered exceptional habitat. Few such forests remain in eastern Maryland. The remaining 12 species exhibit less area-sensitivity but require relatively large contiguous forests to maintain stable populations. A forest containing less than 4 of these 12 species is an indication of severe forest fragmentation and thus, marginal or low quality habitat. These forests may present opportunities for habitat restoration or enhancement. Where there is permanent fragmentation and there is no potential FIDS habitat, conservation is not required.

This edition of the guidance paper includes six additional some revisions to the species list. Additions include broad-winged hawk, brown creeper, veery, black-throated green warbler, cerulean warbler. These species are widely recognized as FIDS, and are included on the list because of recent documentation that these species breed on the Maryland Coastal Plain (Robbins and Blom 1996). All five species are rare breeders on the Maryland Coastal Plain and, with the exception of veery, are highly area-sensitive. Their presence during the breeding season is an indication of high quality FIDS habitat.

A sixth addition to the species list is the wood thrush. Although it breeds statewide, the wood thrush is experiencing significant population declines in Maryland and throughout much of its breeding range in eastern North America. It is negatively impacted by forest fragmentation and maintenance of viable populations requires large contiguous blocks of mature deciduous or mixed deciduous-conifer forest. One additional revision involves a change in the area-sensitivity designation for black-and-white warbler to "*highly area-sensitive*".

Table 1. List of Forest Interior Dwelling Bird species (FIDS) that potentially breed[a] in the Critical Area.

Common Name	Scientific Name	Safe Date[b]	Migratory Class[c]
Red-shouldered Hawk[d]	*Buteo lineatus*	May 1 - Aug 31	Temperate
Broad-winged Hawk[d]	*Buteo platypterus*	June 5 - Aug 10	Neotropical
Barred Owl[d]	*Strix varia*	Jan 15 - Aug 31	Nonmigratory
Whip-poor-will	*Caprimulgus vociferus*	May 10 - July 15	Neotropical
Hairy Woodpecker	*Picoides villosus*	Mar 15 - Aug 31	Nonmigratory
Pileated Woodpecker	*Dryocopus pileatus*	Mar 15 - Aug 31	Nonmigratory
Acadian Flycatcher	*Empidonax virescens*	May 25 - Aug 5	Neotropical
Brown Creeper[d]	*Certhia americana*	May 15 - Aug 31	Temperate
Veery	*Catharus fuscescens*	June 10 - Aug 31	Neotropical
Wood Thrush	*Hylocichla mustelina*	May 25 - Aug 20	Neotropical
Yellow-throated Vireo	*Vireo flavifrons*	May 25 - Aug 15	Neotropical
Red-eyed Vireo	*Vireo olivaceus*	June 1 - July 31	Neotropical
Northern Parula	*Parula americana*	June 1 - Aug 15	Neotropical
Black-throated Green Warbler[d]	*Dendroica virens waynei*	June 10 - Aug 5	Neotropical
Cerulean Warbler[d]	*Dendroica cerulea*	May 25 - Aug 5	Neotropical
Black-and-white Warbler[d]	*Mniotilta varia*	May 15 - July 25	Neotropical
American Redstart[d]	*Setophaga ruticilla*	June 10 - July 20	Neotropical
Prothonotary Warbler	*Protonotaria citrea*	May 10 - July 20	Neotropical
Worm-eating Warbler[d]	*Helmitheros vermivorus*	May 20 - July 20	Neotropical
Swainson's Warbler[d, e]	*Limnothlypis swainsonii*	April 20 - Aug 31	Neotropical
Ovenbird	*Seiurus aurocapillus*	May 20 - Aug 5	Neotropical
Louisiana Waterthrush[d]	*Seiurus motacilla*	May 1 - July 10	Neotropical
Kentucky Warbler[d]	*Oporornis formosus*	May 25 - July 15	Neotropical
Hooded Warbler[d]	*Wilsonia citrina*	May 25 - July 25	Neotropical
Scarlet Tanager	*Piranga olivacea*	May 25-Aug 10	Neotropical

[a] Documentation of breeding evidence from Stewart and Robbins(1958), Iliff et al.(1996), Robbins and Blom (1996).

[b] Safe dates, as listed in Robbins and Blom (1996), indicate the time of year when a species can be assumed to occupy a breeding territory.

[c] Migratory classes: "neotropical" migrant - breeds in temperate North America and winters primarily in Central and South America; "temperate" migrant - breeds and winters primarily in temperate North America; "nonmigratory" - year-round resident with no migratory movements.

[d] These species are highly area-sensitive and most vulnerable to forest loss, fragmentation and habitat degradation.

[e] State-listed as Endangered.

HOW TO DETERMINE IF FIDS HABITAT IS PRESENT

The Critical Area Commission has determined that the presence of FIDS habitat, as used in the Criteria, should be based on the overall quality of FIDS habitat in a forested area. Accordingly, two methods may be used to determine if FIDS habitat is present. The first requires the evaluation of certain forest characteristics such as forest tract size, approximate forest age and forest edge:area ratio. The second method requires that a bird survey be conducted to determine which species are breeding in a particular forest, using appropriate bird survey methods and a qualified observer. Either method, as described below, may be used.

Habitat Determinations Based on Forest Characteristics

The presence and relative abundance or density of many forest nesting bird species is closely related to such features as forest area, age, shape and the proportion of edge habitat present (e.g., Whitcomb et al., 1981, Ambuel and Temple 1983, Lynch and Whigham 1984, Robbins et al., 1986, Askins et al. 1987, Keller et al. 1993). The Criteria provide two examples of forest areas that are considered potential FIDS habitat and are to be conserved in the Critical Area: 1) forest with 100 or more contiguous acres, and 2) riparian forest areas with a width of at least 300 feet (COMAR 27.01.09.04C(2)(a)). In reality, forests that support FIDS have a wider range of characteristics. The following descriptions provide a more accurate guide for identifying FIDS habitat. When these conditions exist, habitat is assumed to be present and protection measures should be employed unless it is determined that the forest does not function as FIDS habitat

A. Forests at least 50 acres in size with 10 or more acres of "forest interior" habitat (i.e., forest greater than 300 feet from the nearest forest edge). The majority of the forest tract should be dominated by pole-sized or larger trees (5 inches or more in diameter at breast height), or have a closed canopy. or

B. Riparian forests at least 50 acres in size with an average total width of at least 300 feet. The stream within the riparian forest should be perennial, based on field surveys or as indicated on the most recent 7.5 minute USGS topographic maps. The majority of the forest tract should be dominated by pole-sized or larger trees, or have a closed canopy.

In both cases, the size of the forest tract is based on the entire forest area, regardless of Critical Area boundaries or property lines. Two forest tracts may be considered unconnected or disjunct if they are separated by nonforested habitat which results in a permanent 30-foot break in the forest canopy (e.g., road, right-of-way). The above forest characteristics are intended to be a guide. On occasion, FIDS may be present in smaller forests or absent in larger ones.

Habitat Determinations Based on Bird Surveys

A bird survey can be used in lieu of forest characteristics to determine if FIDS habitat is present. However, a survey is necessary only if an applicant (e.g., for a proposed development or timber harvest) refutes a habitat determination based on forest characteristics and, seeks a confirmation of the bird species present. A confirmation is the responsibility of the applicant and must be based on current data obtained by a qualified observer using the bird survey methods described below.

Bird Survey Methods

The primary purpose of the bird survey (herein referred to as a "FIDS survey") is to determine the breeding status and approximate location of all bird species present, especially FIDS, in a given forest. This information is used to determine if FIDS habitat is present, as defined in the preceding section, and help develop appropriate conservation measures.

The Critical Area Commission requires the use of standard biological methods to conduct FIDS surveys. Accordingly, the following combination of methods are recommended: 1) point counts, 2) general searching or canvassing during early to mid-morning hours, and 3) canvassing during evening hours for nocturnal FIDS (e.g., Whip-poor-will, Barred Owl). The point count is a widely used quantitative bird survey method (Ralph et al., 1995). Detailed descriptions and evaluations of point count methodology are provided in such publications as Ralph and Scott (1981), Verner (1985) and Ralph et al. (1995). Generally, this method consists of an observer standing at a point or station for a standardized length of time (e.g., 10 minutes) and recording by species the number of all individual birds seen or heard. The count is then repeated at other stations (usually spaced at least 450-600 feet apart) located throughout a site or habitat. Canvassing, used in conjunction with point counts, helps to ensure that species which may be present are not missed and that sufficient observations have been made to accurately determine each species' breeding status. The minimum amount of field effort required to conduct a survey is three mornings (point counts and canvassing during daylight hours) and two evenings (canvassing for nocturnal species). Minimum standards for conducting FIDS surveys are as follows:

1. Conduct point counts during May 25-June 30, between one-half hour before sunrise to four hours after sunrise. The likelihood of detecting most FIDS during the breeding season, especially songbirds, is greatest during early morning hours within this five-week period. Canvassing should be done during the same five-week period or within "safe dates" as listed in Table 1.

2. The minimum number of point count stations that should be located in a forest area is as follows:

Forest Area	No. Point Count Stations
< 200 acres	≥ 1 station per 15 acres
≥ 200-500 acres	≥ 1 station per 25 acres

3. Locate point count stations at least 450 feet apart and, where possible, place them 150 feet or more from the nearest forest edge.

4. Point count stations should be distributed throughout potential FIDS habitat and located in a manner that attempts to maximize the number of forest interior dwelling bird species detected. Habitat associations of each species should be taken into consideration so that relatively species-rich habitats (e.g., mature or old forest, structurally diverse stands, riparian forest, coves and ravines), species with specialized habitat requirements (e.g., Louisiana Waterthrush) and highly area-sensitive species are not overlooked or under surveyed. If possible, stratify the number of stations by major forest type and age class (e.g., mature upland deciduous forest, mature deciduous floodplain forest, pole-stage mixed pine-hardwood forest).

5. Conduct at least three point counts per station, with each count occurring on a different morning and separated by at least five days.

6. During each point count, record the species (including non-FIDS), breeding code (e.g., 'X' for a species seen or heard in breeding habitat within safe dates; see Appendix A), sex and age, if possible, of each individual bird or breeding pair of birds seen or heard. Also, on each day, record the date, start and finish time, general weather conditions and observer name. Record similar information during canvassing efforts.

7. Conduct point counts only during appropriate weather conditions. Avoid days with precipitation, heavy fog and strong winds. Calm, seasonably warm conditions are best.

8. Canvassing for diurnal species should be conducted during early to mid-morning (about one-half hour before sunrise to four hours after sunrise). These surveys can be done on the same mornings as point counts. Canvassing can be used to upgrade the breeding status (e.g., from "possible" to "probable" or "confirmed") of select species or to search areas where no point count stations are located. Canvassing can be particularly useful to upgrade the breeding status of relatively inconspicuous species with large breeding territories (Hairy Woodpecker, Pileated Woodpecker and Red-shouldered Hawk). Point counts alone may fail to detect these species frequently enough to accurately determine their breeding status.

9. Canvassing for nocturnal species should be conducted on at least two evenings, separated by at least five days. Broadcasting taped recordings of Barred Owl and Whip-poor-will calls may increase the probability of detecting these species. <u>However, tape recordings must be used judiciously since birds may abandon breeding territories if the tapes are played too often. Once a target species is detected, stop using the recording that evening.</u>

10. All surveys on a given forest tract, especially point counts, should be conducted by the same observer.

11. The person conducting the survey must be a <u>qualified observer</u>; i.e., capable of identifying all potentially occurring birds by sight and sound. A current list of qualified observers can be obtained by contacting the Maryland Department of Natural Resources (DNR) or the Critical Area Commission. A person is deemed qualified by DNR if he or she successfully completes a DNR administered field test on bird identification, or is recommended to DNR as qualified by at least two references

experienced in forest bird identification. The references should be familiar with the candidate's skills and experience in bird identification and survey methods, particularly in forested habitats. For additional information, please contact the Critical Area Commission or DNR.

12. The minimum data reporting requirements to DNR and the Critical Area Commission are as follows:
    a. For each point count station, the number, sex and age (if possible) of birds observed, by species, during each count.
    b. A table listing the proposed breeding status (observed, possible, probable or confirmed) of each species observed in the survey area and, if appropriate, nearby or adjacent areas. A species shall be considered breeding at a given site if survey data support a "probable" or "confirmed" breeding status determination. (See Appendix A for definitions of these criteria.)
    c. A map showing the location of each point count station and extent of canvassing .

Interpretation of Bird Survey Data

The Critical Area Commission and DNR provide final interpretation of survey data using the breeding status criteria listed in Appendix A as a guide. The entire forest tract is considered when determining the number and breeding status of forest interior dwelling bird species present.

If the survey yields either of the following results, FIDS habitat is present:

A. At least four of the species listed in Table 1 are present with a "probable" or "confirmed" breeding status, as defined by Robbins and Blom (1996).
<u>or</u>

B. At least one highly area-sensitive species, as listed in Table 1, is present with a "probable" or "confirmed" breeding status.

CONSERVATION GUIDELINES

This section discusses planning tools that can be used to achieve long-term, wide-scale FIDS habitat conservation as well as FIDS conservation at the site specific level.

A . REGIONAL AND LOCAL LAND USE PLANNING

The land use planning process, whether at the regional or local level, provides an opportunity to pro-actively address protection and conservation of FIDS habitat within and outside of the Critical Area. Land use planning efforts should be used to identify and protect the largest contiguous tracts of forest in a region. When possible, the quality of and threats to these habitat areas should be assessed in order to prioritize habitat areas for protection and conservation.

Land use planning tools, like mapping habitat areas or regional growth management, enable local jurisdictions to use local authority to minimize impacts to FIDS habitat at the site level and to protect the highest quality and most valuable forest and FIDS habitat in the region and over time. In addition, FIDS habitat conservation can encompass many other conservation goals that have been identified within a region. For example, by virtue of the size and composition of forest that is needed to protect FIDS, thousands more species will benefit from the protection of large high quality forest areas.

Land use planning tools such as smart growth and flexibility in zoning and subdivision ordinances can provide conservation of important forest habitat before it gets to the site planning stage. Growth Management and Smart Growth strategies enable local governments to direct growth away from forested and other sensitive resource areas and encourage development in areas with existing infrastructure.

Certain ordinances, regulations, and development standards actually cause unintended forest fragmentation. In some cases, the goals of these ordinances may not allow for a great deal of flexibility, (e.g., public safety); however, wherever possible, these standards should be written to better achieve habitat and natural resources protection goals. Local governments should evaluate the effect of existing standards so that these standards do not result in unnecessary forest clearing for example requirements for large lots, extensive setbacks that increase the distance between lots, and wide roads.

In order to protect forest habitat, local ordinances should:

- provide flexibility in required road widths and frontage widths to eliminate/reduce gaps in the forest canopy;

- reduce minimum lot size requirements to reduce the amount of land that is consumed by single family development;

- encourage transfer of development rights from large forested regions to areas with existing infrastructure and fewer natural resources

- provide flexibility in area requirements for septic reserve areas where practicable

- require clustering to reduce forest fragmentation

- encourage shared driveways and shared septic systems to reduce openings in the forest

See Appendix B for additional information on flexible ordinance language and development standards.

B. SITE DESIGN GUIDELINES FOR FIDS

In addition to land use planning, site design is an important approach to FIDS habitat conservation. In general, the greatest loss of FIDS habitat occurs when development fragments or intrudes into the forest interior or increases the area of forest edge. The following ***Site Design Guidelines*** (also in Appendix C) provide guidance to landowners and plan reviewers on how to achieve the greatest possible protection and conservation of FIDS habitat when development is proposed. A key to using the ***Site Design Guidelines*** is to determine and assess the amount of interior habitat that would be impacted under a proposed development scenario. When these guidelines are followed, the impacts to interior forest habitat are minimized.

Local governments should evaluate their existing subdivision and zoning ordinances to determine if they will allow the implementation of the following ***Site Design Guidelines***.

Site Design Guidelines

1. Restrict development to non-forested areas.

2. If forest loss or disturbance is unavoidable, concentrate or restrict development to the following areas:
   a. the perimeter of the forest (i.e., within 300 feet of the existing forest edge)
   b. thin strips of upland forest less than 300 feet wide
   c. small, isolated forests less than 50 acres in size
   d. portions of the forest with low quality FIDS habitat; e.g., areas that are already heavily fragmented, relatively young, exhibit low structural diversity, etc.

3. Maximize the amount of forest "interior" (forest area > 300 feet from the forest edge) within each forest tract (i.e., minimize the forest edge:area ratio). Circular forest tracts are ideal and square tracts are better than rectangular or long, linear forests.

4. Minimize forest isolation. Generally, forests that are adjacent, close to, or connected to other forests provide higher quality FIDS habitat than more isolated forests.

5. Limit forest removal to the "footprint" of houses and to that which is necessary for the placement of roads and driveways.

6. Minimize the number and length of driveways and roads.

7. Roads and driveways should be as narrow as possible; preferably less than 25 feet in

width and 15 feet in width, respectively.

8. Maintain forest canopy closure over roads and driveways.

9. Maintain forest habitat up to the edges of roads and driveways; do not create or maintain mowed grassy berms.

10. Maintain or create wildlife corridors.

11. Do not remove or disturb forest habitat during April-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.

12. Landscape homes with native trees, shrubs and other plants and/or encourage homeowners to do so.

13. Encourage homeowners to keep pet cats indoors or, if taken outside, kept on a leash or inside a fenced area.

14. In forested areas reserved from development, promote the development of a diverse forest understory by removing livestock from forested areas and controlling white-tailed deer populations. Do not mow the forest understory or remove woody debris and snags.

15. Afforestation efforts should target a) riparian or streamside areas that lack woody vegetative buffers, b) forested riparian areas less than 300 feet wide, and c) gaps or peninsulas of non-forested habitat within or adjacent to existing FIDS habitat

See Figures 3A, 3B, and 3C for illustrations of several of the ***Site Design Guidelines.***

GUIDELINES FOLLOWED

GUIDELINES NOT FOLLOWED

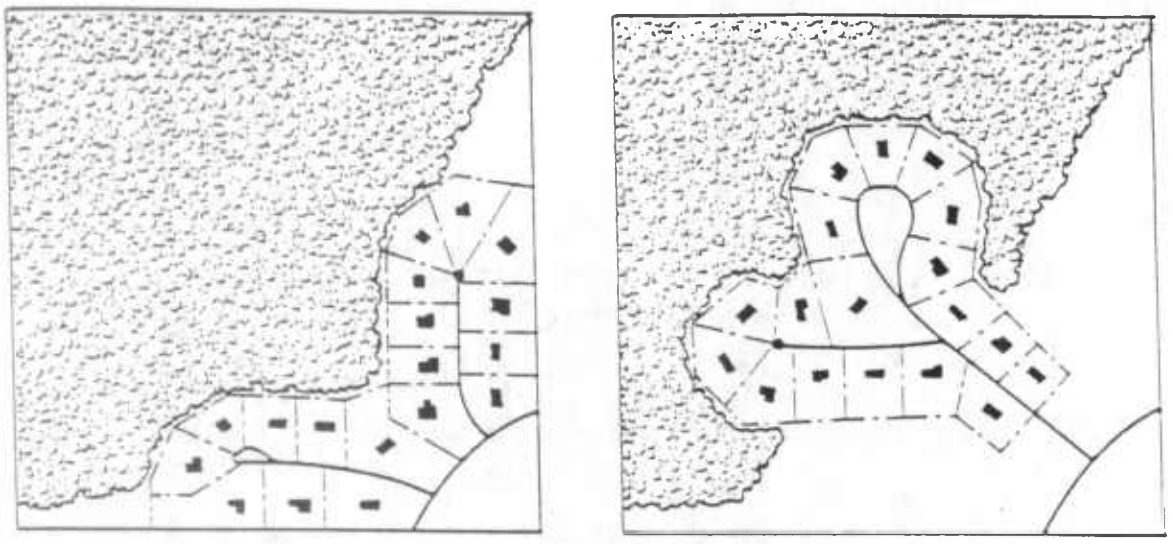


Figure 3A. Restrict development to nonforested areas when possible or limit development to forest edge in order to maximize retention of forest interior.

GUIDELINES FOLLOWED

GUIDELINES NOT FOLLOWED

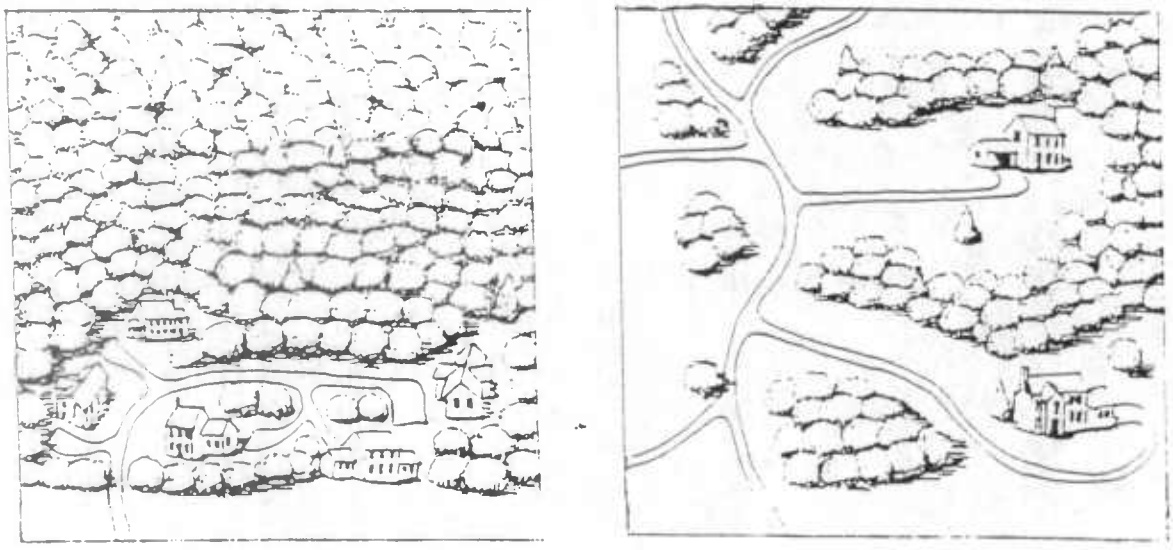
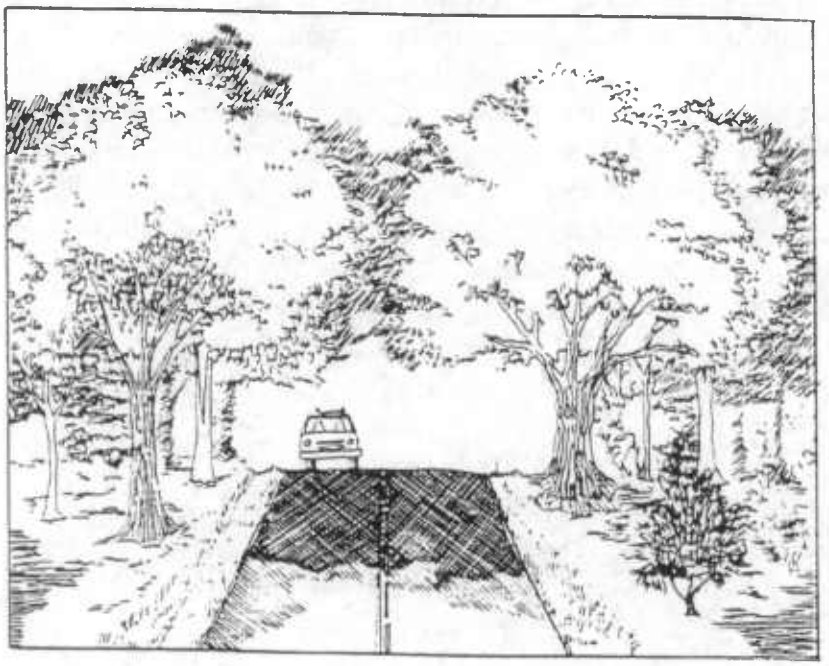


Figure 3B. Limit the amount of forest clearing, reduce the length of driveways and other roads, and cluster development to minimize impacts to forest.

Figure 3C.

GUIDELINES FOLLOWED



GUIDELINES NOT FOLLOWED

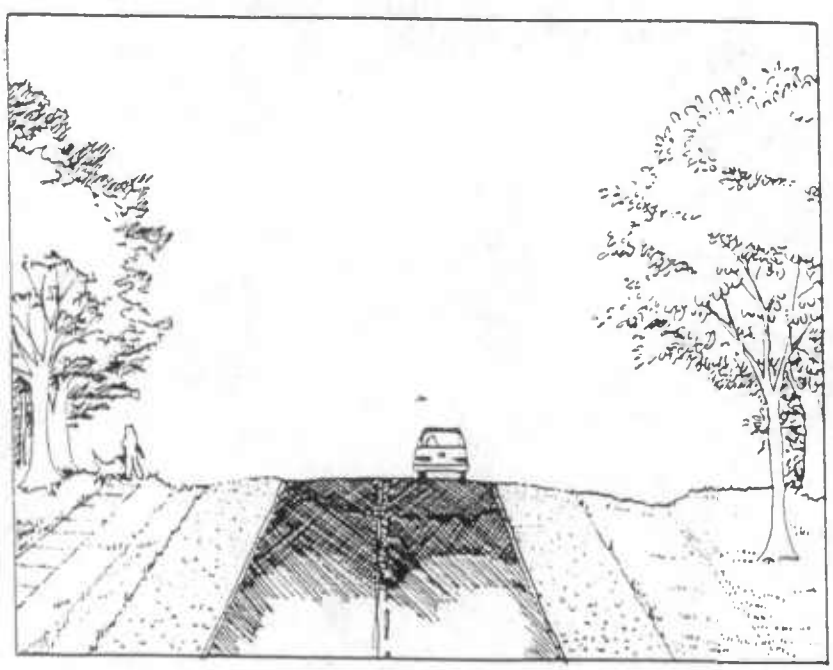


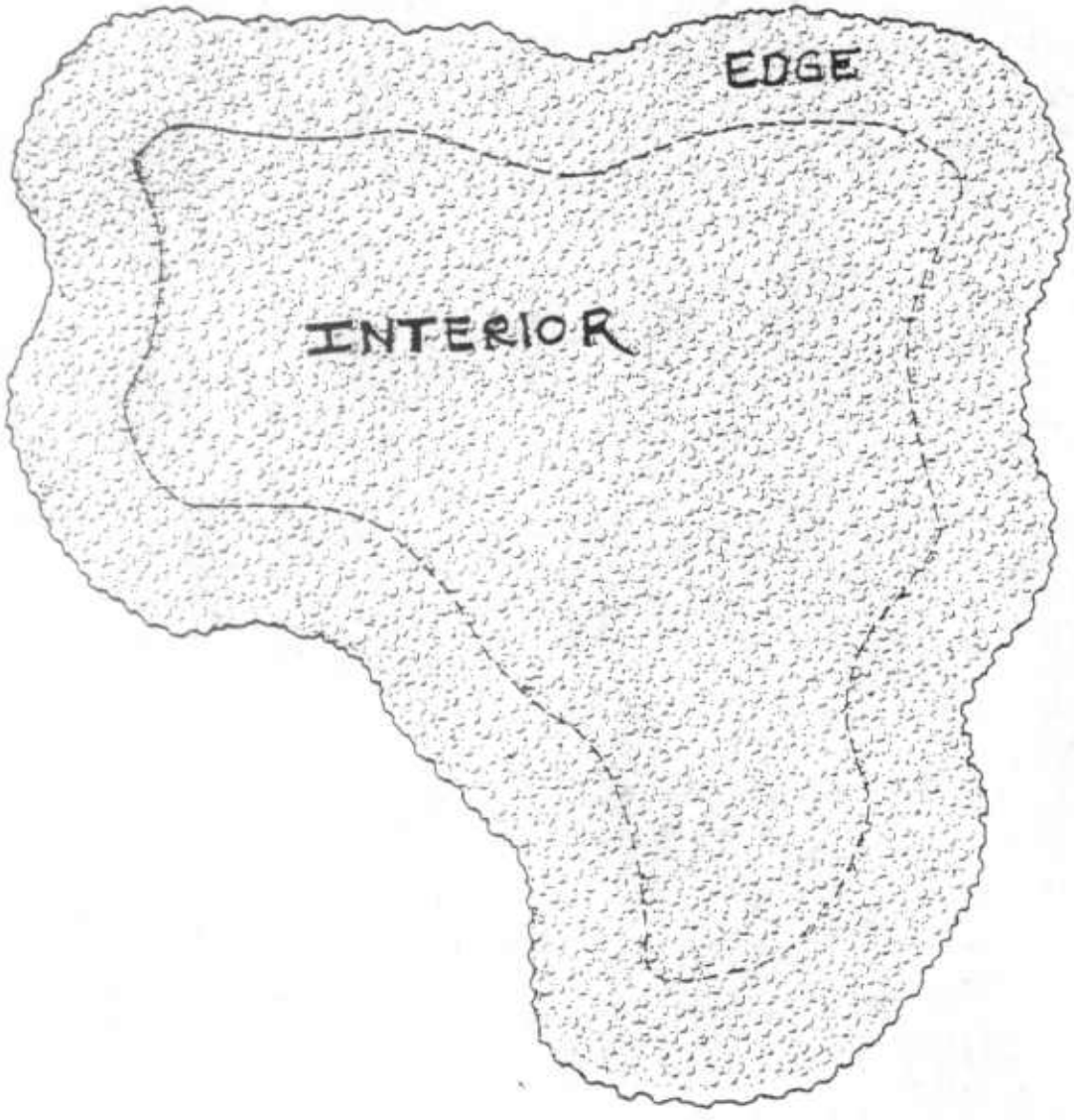
Figure 3C. Maintain forest habitat to edge of roads and driveways and maintain canopy closure over roads where possible.

(The following paragraph may be included as a SIDEBAR or just a separation in the text.)

HOW TO DETERMINE INTERIOR HABITAT LOSS

Direct habitat loss refers to the actual acreage of forest area that is cut or cleared. Interior habitat loss on a parcel refers to acres of forest interior that are cut or converted to edge. To determine the interior habitat of a parcel, the forested "edge" of 300 feet is subtracted from the total contiguous forest. The area left is forest interior provided it is at least ten acres in size. When the FIDS ***Guidelines*** (outlined above) are followed the amount of interior habitat loss will be minimized. When evaluating site design options for a particular property, potential impacts to interior habitat after development are compared to predevelopment interior habitat. The site plan that results in the least amount of interior habitat impacts is generally the better one. Figure 4 shows a schematic of a contiguous forest tract with edge habitat and interior habitat identified.

Figure 4. Edge vs. Interior



MITIGATION

The Criteria direct local jurisdictions to protect and conserve those forested areas necessary to support FIDS by developing a *management program* which has as its objective: conserving the wildlife that inhabit or use the forested areas. (COMAR 27.01.09.04) This provision requires the conservation and protection of all FIDS habitat, even that located on grandfathered lots. The primary objective of FIDS habitat conservation and protection is to preserve or retain the maximum amount of contiguous, undisturbed forest habitat, particularly the portion of forest that is "interior habitat". This protection strategy requires that most existing FIDS habitat be preserved on-site. This can best be achieved by following the ***Site Design Guidelines.*** However, there are situations where FIDS habitat impacts occur even when the ***Guidelines*** are followed. Therefore, in order to meet the conservation and protection requirement, local jurisdictions should include in their management programs mitigation requirements that must be met whenever FIDS habitat is impacted.

Mitigation that results in the conservation and protection of FIDS habitat can be achieved in a number of ways. FIDS mitigation can, in many cases, be achieved on-site concurrently with general forest replacement requirements (reforestation) if the reforestation area expands or creates new FIDS habitat. **Off-site mitigation should only be considered when no effective, long-term on-site habitat protection is possible**. This determination should be made by the local jurisdiction with the input of DNR and the Critical Area Commission staff. The use of off-site mitigation, if well directed, may provide for the creation/protection of large, potentially high quality forests. This method of FIDS protection is similar to the concept of "no net loss" made popular by wetland protection programs where impacts must first be avoided and only when avoidance is not possible, new habitat is created to replace wetlands lost.

For example, a large subdivision may be proposed on a site that contains forest that have been identified as FIDS habitat. The development is proposed predominantly in the non-forested areas of the site however some impacts to the forest edge will occur. While the ***Site Design Guidelines*** have been followed by avoiding direct impacts to the forest interior, there are still FIDS habitat impacts. These impacts should be mitigated by creating FIDS habitat on or off site.

In another example, there may be no options for avoiding impacts when developing a small forested grandfathered lot with a single family dwelling. If it is determined that there are no alternative development scenarios where FIDS habitat impacts could be avoided, off-site mitigation may provide a better long-term FIDS habitat protection strategy.

As an alternative to requiring small property owners to find their own sites for FIDS mitigation, local jurisdictions may adopt a fee-in-lieu program under which the local jurisdiction would take responsibility for implementing the mitigation. A local government may be better equipped to ensure successful restoration and protection of a mitigation area as well as to help landowners of smaller properties meet requirements. The opportunity for creating and maintaining large forested habitat areas may be greater when a number of smaller projects are combined. However, it is recommended that in the case of impacts due to larger projects (e.g., new subdivision, commercial development) the landowner or developer should be held responsible for locating the mitigation site.

How much mitigation should be required?

When FIDS habitat is impacted, the amount of FIDS mitigation required is based on the following:

1. A determination of whether or not the ***Guidelines*** are followed; * **
2. The number of acres of FIDS habitat that is directly cut; and
3. The number of acres of interior habitat loss (cut or converted to edge).

If it is determined that the ***Guidelines*** were followed, the amount of FIDS mitigation should equal **the number of acres of *direct forest habitat lost.***

If it is determined that the ***Guidelines*** were not followed, the amount of FIDS mitigation should equal **the number of acres of *direct forest habitat loss*, plus, two times the number of acres of *interior habitat loss* (FIDS habitat cut or converted to edge).**

** Factors which may be taken into account when determining if the **Guidelines** can be followed include the size of the parcel, whether or not the parcel is grandfathered, and site constraints that may limit development designs.*

*** One means to help evaluate whether an adequate attempt has been made to apply the **Guidelines** is to determine if a minimum of 80% of predevelopment forest interior will remain as viable habitat after development. This method should not be the only criteria that is considered. An attempt should always be made to apply all the **Guidelines** to every project.*

The following steps are proposed as a method to determine the amount of interior habitat lost or impacted under a proposed development scenario.

1. Identify and calculate the acreage of all FIDS habitat on the parcel, taking into account all contiguous forest areas on and off the property. (See section on how to determine if FIDS habitat is present).

2. Identify and calculate the pre-development acres of forest interior by delineating the 300-foot wide forested edge and measuring the acreage of remaining interior habitat. (See Figure 4.)

3. Calculate the area of forest cut in the interior and edge of FIDS habitat. This area is considered the ***direct forest habitat loss.***

4. Determine the post-development forest cover and remaining interior habitat by delineating the proposed new edge habitat after development (300 ft. wide forested edge) and measuring the acres of interior habitat that remain. Edge habitat is created whenever there is a minimum 30-foot wide break in the forest canopy (e.g., a road or lawn).

5. Subtract the post-development interior from the pre-development interior. This area is considered the ***interior forest habitat loss***.

Appendix D is a FIDS Conservation Worksheet to use in helping to evaluate how well the Guidelines have been followed and to help with the calculation of any mitigation.

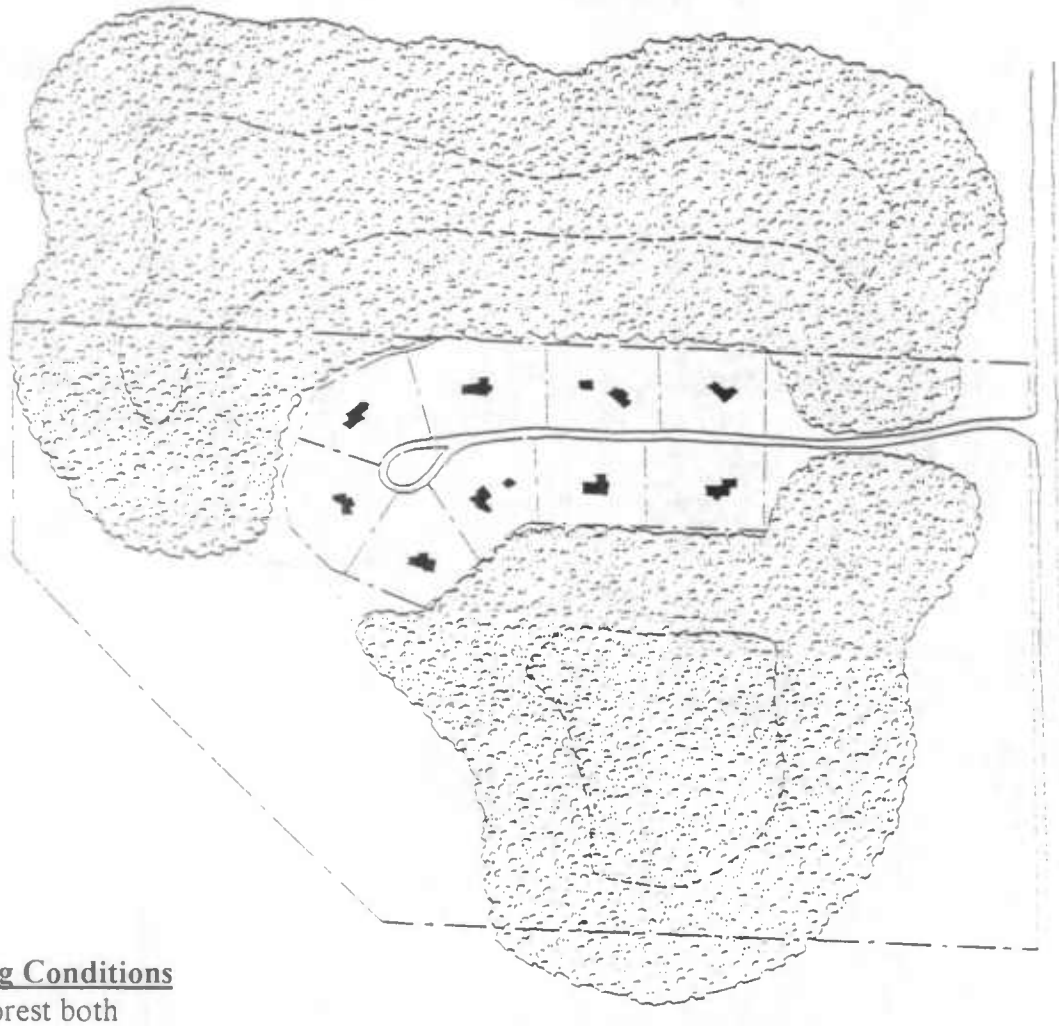
The following example demonstrates how two site designs with the same number of acres cleared can result in widely different levels of interior impacts.

Example:

Consider a 96 acre site purchased for development. The site is 70% forested with agricultural fields on the southwestern and the eastern edges of the parcel. The forest on the property is connected to a larger forest. The entire forest both on and off the parcel is functioning as FIDS habitat. The owner proposes to build nine houses. He directs his consultant to design two different layouts for the nine lots. The consultant prepares two site plans and calculates the amount of direct and interior loss of FIDS habitat after development using the method described above. (See Figures 5A and 5B.)

Figure 5A

DEVELOPMENT SCENARIO 1
(*Guidelines* not followed)



Existing Conditions

Total forest both on and off parcel = 112 acres

Parcel size = 96 acres

Forest on parcel prior to development = 67 acres

FID habitat on parcel prior to development = 67 acres

Forest interior prior to development = 38 acres

Post Development Conditions

Total forest to be cut = 21 acres

Total forest to remain on parcel = 46 acres

Forest in northern corner of parcel =10acres

Forest in southern portion of parcel = 36 acres

Total FID habitat to remain on parcel = 10 acres

(Forest fragment in southern portion of parcel is less than 50 acres, too small to support FID; northern portion of the forest is part of a forest tract that is larger than 50 acres with greater than 10 acres of interior.)

Interior forest to remain on parcel = 1 acre

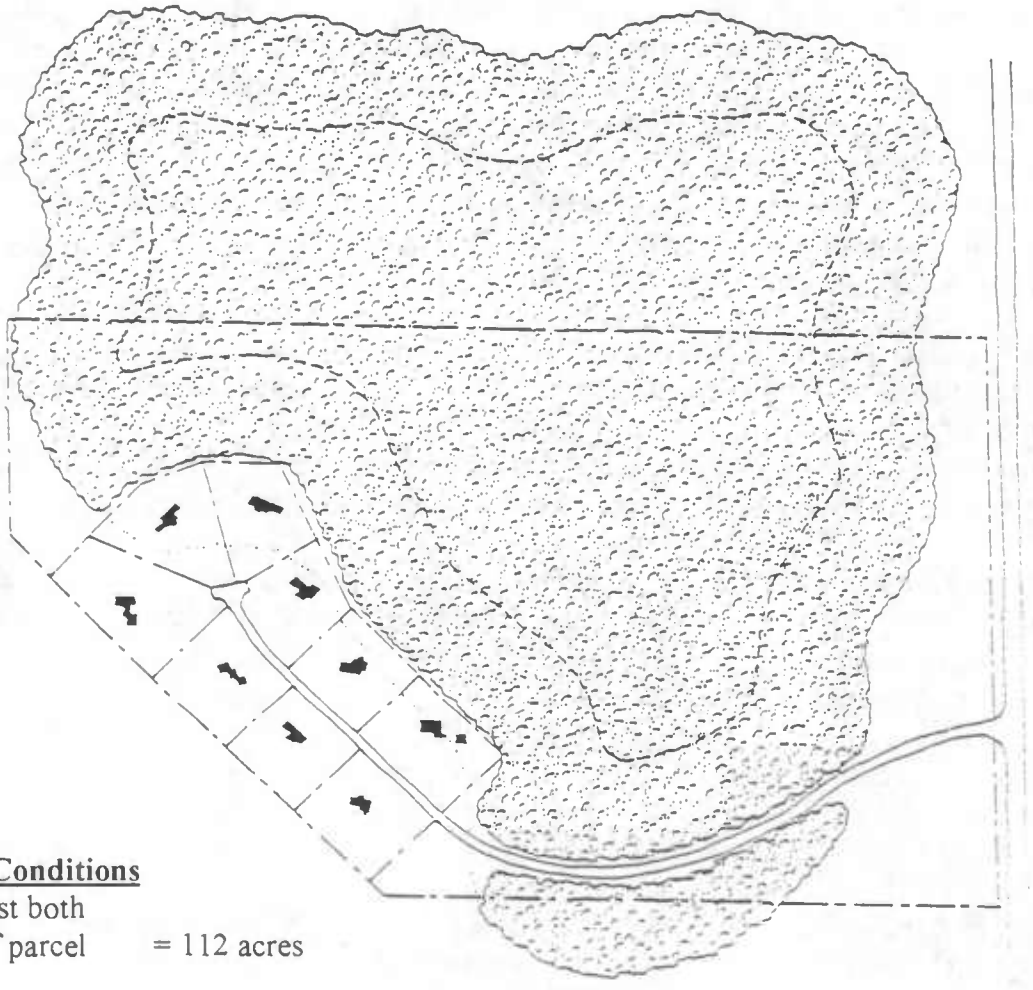
FID Mitigation (*Guidelines* not followed)

Direct FID forest loss = 21 acres

Interior forest loss = 37 acres

Mitigation = Direct FID forest loss + 2(interior forest loss) = 21 acres + 2(37) = 95 acres

Figure 5B. **DEVELOPMENT SCENARIO 2**
(***Guidelines*** followed)



Existing Conditions

Total forest both on and off parcel = 112 acres

Parcel size = 96 acres

Forest on parcel prior to development = 67 acres

FID habitat on parcel prior to development = 67 acres

Forest interior prior to development = 38 acres

Post Development Conditions

Total forest to be cut = 10 acres

Total forest to remain on parcel = 57

Total FID habitat to remain on parcel = 55 acres
(A small portion of the forest to be left in the southern part of the site will be isolated from the rest of the forest and too small to function as FID habitat.)

Total interior to remain = 27 acres

FID Mitigation (***Guidelines*** followed)

Direct FID habitat loss = 10 acres

Interior forest loss = 11 acres

Mitigation = Direct FID habitat loss = 10 acres

What is Acceptable as Mitigation?

The goal of mitigation is to provide long-term FIDS habitat, therefore FIDS mitigation sites should contain or result in, through reforestation, a contiguous area of at least 100 acres with a minimum of 20 acres of interior. In those situations where it is not possible to find an appropriate area of 100 acres is may be possible to reduce the minimum size to 50 acres if the reforestation guidelines on the following page are followed. The minimum contiguous forested area does not have to be contained in one parcel. There should be a reasonable expectation that a mitigation area will remain undeveloped and forested in perpetuity. (For assistance in finding appropriate mitigation sites see Appendix E, Resources for Locating Mitigation Sites)

Once the areas of ***direct forest habitat loss*** and ***interior forest habitat loss*** have been calculated and the required acreage of mitigation is determined, mitigation for the FIDS forest habitat losses may be either in the form of:

***Creation* of FIDS habitat through reforestation, or**
***Protection* of existing FIDS habitat once mitigation for direct losses have been met.**

For ***direct forest habitat*** impacts, all mitigation must result in the creation of new FIDS habitat.** Again, simple forest replacement proposed to meet the basic Critical Area reforestation requirements can satisfy the FIDS mitigation **only** if the reforestation area creates a new area of FIDS habitat or expands an existing habitat area.

***There may be some flexibility in dealing with grandfathered lots of 1 acre or less when a jurisdiction can demonstrate that other programs within the jurisdiction provide protection and creation of forests that will function as FIDS habitat. Examples of such programs include:*

- *using money from other mitigation fee-in-lieu funds to create FIDS habitat*
- *protecting forest lands through conservation programs such as Rural Legacy*
- *protecting forests outside of the Critical Area*

Once mitigation for the direct forest habitat impact has been satisfied, mitigation for the ***interior forest habitat*** impact may be achieved either by creation of FIDS habitat (reforestation) or protection of existing FIDS habitat. However, when the protection option is chosen, the protected acres are given only half credit toward the required mitigation acres. Reforestation is given full credit toward meeting the interior forest habitat mitigation requirements than protection due to the fact that all forest in the Critical Area are afforded some protection under the Critical Area Criteria. While the long-term viability of existing FIDS habitat is improved with permanent protection, new habitat areas must be created to maintain and increase the area of viable FIDS habitat in the Critical Area.

***Creation* of FIDS habitat through reforestation**

Reforestation to create FIDS habitat refers to the reestablishment of locally native forest on a currently non-forested site that will create a forest large enough to function as FIDS habitat. Reforestation through natural succession or planting is given full credit toward FIDS mitigation requirements. For example, if the total mitigation required for impacts to FIDS habitat is ten acres, then reforestation of ten acres of FIDS habitat would fulfill the FIDS mitigation requirement.

If mitigation creates new FIDS habitat through planting or natural regeneration, this mitigation may count toward the basic Critical Area forest replacement requirements. However, forest replacement may not count toward FIDS mitigation unless it creates FIDS habitat.

FIDS Reforestation Guidelines

1. Reforestation should be designed to maximize the area of interior habitat (see Figure 6).

2. Fill in gaps or openings in existing forested areas. Reforest non-forested peninsulas (see Figure 6).

3. Establish or extend a riparian forest buffer to provide a minimum buffer width of at least 300 feet. This reforestation should be part of a forest tract at least 50 acres in size (see Figure 6).

4. All mitigation, with the possible exception of that along a riparian area, should result in the establishment of a minimum forest tract size of 100 acres of which 20 acres is forest interior.*

5. Use natural succession and/or plantings of locally native tree and shrub species to create new habitat.

6. When enlarging forest patches, create shapes such as circles or squares which minimize edge and provide interior habitat.

7. Connect forest fragments to other forest or forest fragments with a corridor at least 300 feet in width.

8. The reforestation area should be comprised predominantly of hardwood. If planting, plans should be designed so that at the time of canopy closure at least 75% of the canopy tree species are locally native hardwoods.

9. All mitigation sites must be permanently protected through a conservation easement or other legal mechanism (See Appendix F). No development may occur in these areas. Some timber harvesting may occur provided Critical Area timber harvest guidelines are followed.

* *It may be possible to have a mitigation area less than 100 acres when a 50-100 acre mitigation site:*
- is adjacent to a major river corridor (e.g., Potomac, Choptank, Chester) or along the Bay especially along

the tips of peninsulas - these landscape features provide FIDS breeding habitat and tend to be important migratory stopover areas for FIDS and other landbirds;
- is located in a heavily forested landscape (>75% forest within 10km) and large forest tracts (>500 acres) are nearby (within 500 m);

- contains old growth forest, unique natural communities and/or rare, threatened or endangered species;

Figure 6.

[Illustrations for Figure 6. are currently being finalized and will be included in the next draft document.]

Forest tract before reforestation: 117 acres
Interior before reforestation: 40 acres

Reforestation acreage: 9 acres
Forest tract after reforestation: 66 acres
Interior after reforestation: 126 acres (This is a 61% increase in interior, with only an 8% increase in total forest tract size.)

Figure 6. Target mitigation to fill openings in existing forest and to extend or fill in gaps along riparian areas.

***Protection* of existing FIDS habitat**

Protection of existing FIDS habitat as a form of mitigation refers to the permanent protection of existing forest habitat from development impacts. Protection may be achieved through the acquisition of the land, purchase of development rights and protection by conservation easements. Half credit toward the FIDS mitigation requirement is given. For example, if the mitigation required for FIDS habitat is 10 acres, then the protection of 20 acres of FIDS habitat would fulfill the mitigation requirement.

FIDS Protection Guidelines

1. All mitigation should result in the establishment of a minimum forest tract size of 100 acres of which 20 acres is forest interior. Generally, the larger the size of a forest tract, the greater the value for FIDS.

2. In most cases the older a forest stand, the more valuable it is for the greatest number of FIDS.

3. Protect forest land adjacent to lands that are currently protected or are managed with a conservation objective (e.g., public lands, lands protected through land trusts, wetlands, habitat of threatened and endangered species.)

4. All mitigation sites must be permanently protected. No development may occur in these areas. Some timber harvesting may occur provided Critical Area timber harvest guidelines are followed. Refer to Appendix E for information on conservation easements.

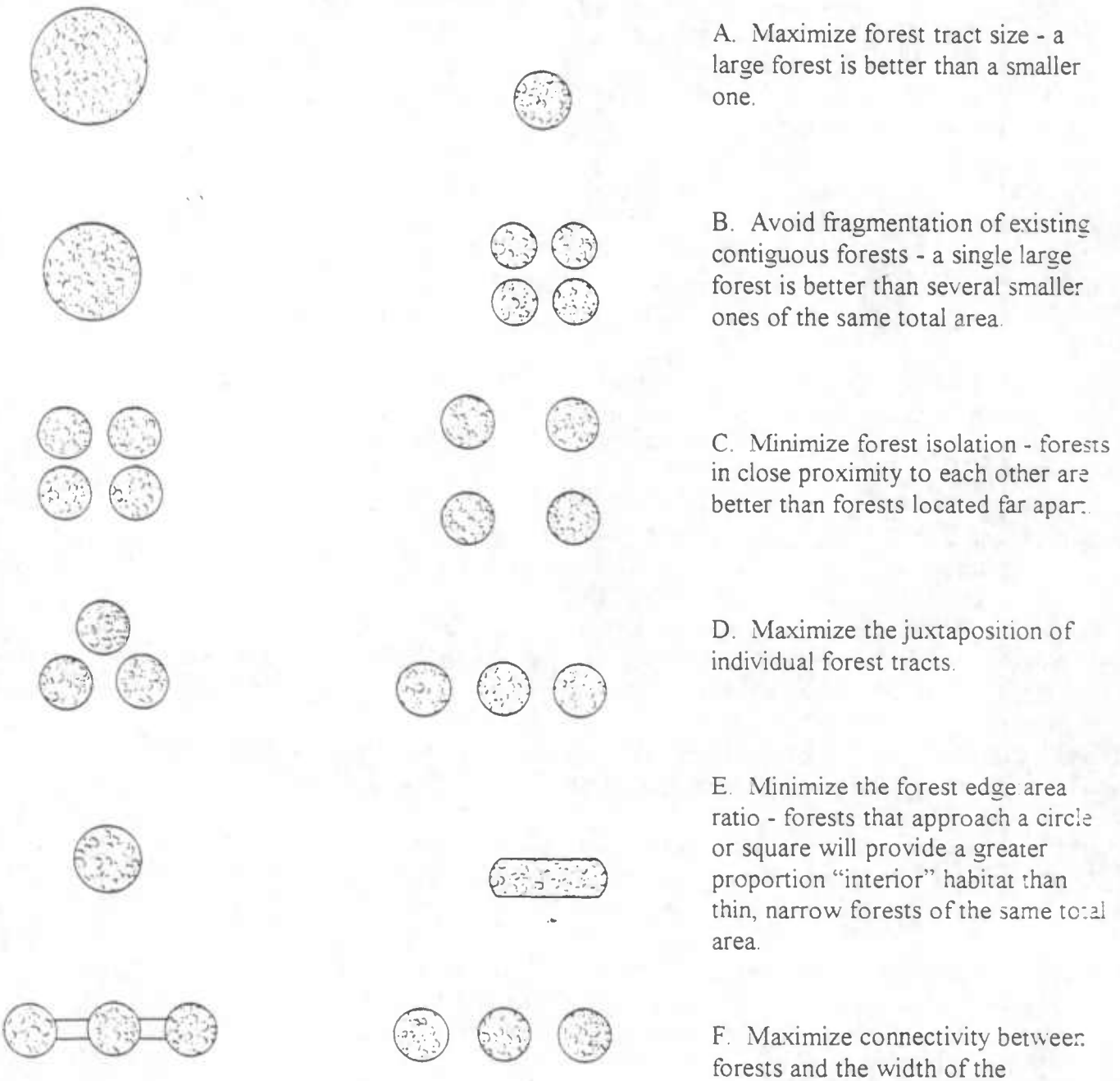
For a list of information to submit to local government when proposing a mitigation site for either creation or* protection *of FIDS habitat see Appendix G.

Conclusion:

Mitigation is just one part of an overall conservation strategy for FIDS in the Critical Area. The most effective FIDS conservation begins with avoiding development impacts to FIDS habitat through long-term land use planning and implementation of ***Site Design Guidelines***. In a hierarchy of protection strategies for FIDS, mitigation is a last resort, to be used only after land planning and site design options have been exhausted.

Conservation of FIDS habitat should be considered in other existing voluntary and regulatory programs. Many land trusts, local and state government, and incentive programs are currently protecting forests that can serve as core tracts to add on to within a county or a region. FIDS conservation can, in many cases, be dovetailed with wetland protection and mitigation, threatened and endangered species protection and Forest Conservation Act requirements. Cooperation across jurisdictional boundaries and between public and private interests will also greatly increase the effectiveness of FIDS conservation throughout the region. The design principles represented in Figure 7 summarize landscape level conservation principles that apply to FIDS at both the large and small scale. It is important to keep these principles in mind when considering either the protection of existing habitat and/or mitigation for habitat impacts.

Figure 7. A schematic of preserve design principles as they apply to forest interior dwelling bird (FID) conservation; from Diamond (1975).



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APPENDIX A

DEFINITIONS OF BREEDING STATUS CATEGORIES AND CODES

There are 3 breeding categories: POSSIBLE, PROBABLE, and CONFIRMED. Different codes exist within categories. The correct use of the categories and codes is essential for documenting breeding evidence.

POSSIBLE (always a 1-letter code)

O - Species observed at a site but not in breeding habitat. This code is primarily for birds that are not believed to breed at the site. Flyovers and any species outside of "Safe Dates" (Appendix --) with no further breeding evidence should be recorded as 'O'.

X - Species heard or seen in breeding habitat within Safe Dates. Be very cautious during migration periods.

PROBABLE (always a 1-letter code)

A - Agitated behavior or anxiety calls from adult. Parent birds respond to threats with distress calls or by attacking intruders. This does not include responses to "pishing" or tape playing of recorded calls.

P - Pair observed in suitable breeding habitat within safe dates. Use this code with caution.

T - Territorial behavior or singing male present at same location on at least 2 different days. Territoriality can be presumed from defensive encounters between individuals of the same species, or by observing a male singing from a variety of perches within a small area.

C - Courtship or copulation observed. This includes displays, courtship feeding, and birds mating.

N - Visiting probable nest site. This code applies when a bird is observed visiting a probable nest site repeatedly but no further evidence is seen.

B - Nest building by wrens or excavation by woodpeckers. Both groups build dummy or roosting nests at the same time they are building a real one, but an unmated male will exhibit the same behavior.

CONFIRMED (always a 2-letter code)

NB - Nest building (except wrens and woodpeckers) or adult carrying nesting material. Be cautious with this code since carrying sticks is part of the courtship ritual (Code 'C') for some species.

DD - Distraction display; including injury feigning. Agitated behavior (Code 'A') can be mistaken for a distraction display.

UN - Used nest found. Use extreme caution. Nests are difficult to identify. If unsure, forget it - removing or collecting a nest is illegal without a permit.

FL - Recently fledged young or downy young. This includes dependent young. Be cautious of species that range widely soon after fledging. Don't forget to look for dead fledglings or nestlings along

roads.

FS - Adult bird seen carrying fecal sac. Excreted feces of nestlings are contained in a membranous sac and often carried away by the nest by the parents.

FY - Adult carrying food for young. Be cautious since some species feed young long after wandering from a nest site or carry food for a long distance. Many also engage in courtship feeding (Code 'C').

ON - Occupied nest. presumed by activity of parents; entering nest hole and staying, parents exchanging incubation responsibilities, etc. Primarily intended for hole nesters and nests too inaccessible to see the contents.

NE - Nest with eggs or eggshells or ground. Identify these very carefully.

NY - Nest with young seen or heard.

Examples to use as guidelines; from the "Maryland and DC Breeding Bird Atlas Project Handbook"

1. Woodpecker drumming: POSSIBLE - X within Safe Dates; PROBABLE - T if same place 2 different days. This refers to territorial drumming not feeding.

2. Duck summers on pond without suitable adjacent marshes: POSSIBLE - O.

3. Woodcock nuptial flights for 3 weeks: PROBABLE - T (POSSIBLE - X if observed only once); PROBABLE - C if courtship and display to female observed.

4. Gulls frequenting dumps, plowed fields, parking lots throughout summer in unsuitable nesting habitat: POSSIBLE - O.

5. Song Sparrow seen carrying nesting material: CONFIRMED - NB.

6. Wood Thrush seen on nest for extended period of time but too high to see contents: CONFIRMED - ON.

7. Great Blue Heron feeding along a river away from any known nesting area: POSSIBLE - O. Watch such a bird closely. It could lead to a colony.

8. Second year American Redstart singing abnormal song in a hedgerow in early June: POSSIBLE - O.

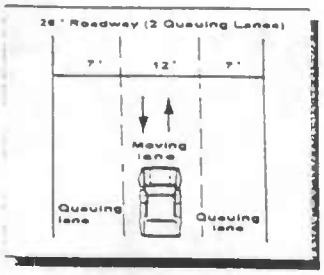
9. Male House Wren sings all summer and stuffs nest boxes with sticks; no evidence of a mate: PROBABLE - B.

10. Male and female Scarlet Tanagers observed together several times in the same area but no nest or young ever seen: PROBABLE - P.

APPENDIX B

Adapted from the *Model Development Principles*, 1998.
(Center for Watershed Protection, Website: www.cwp.org)

The following model development principles provide site design guidance for economically viable, yet environmentally sensitive development. The goal of using the principles is to provide planners, developers, and local officials with benchmarks to investigate where existing ordinances may be modified to reduce impervious cover, conserve natural areas(e.g., forest and FIDS habitat), and prevent stormwater pollution. These development principles identify areas where existing codes and standards can be changed to better protect forest, streams, and wetlands at the local level.



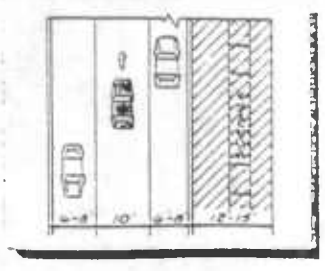
Residential Streets and Parking Lots

(Habitat for Cars)

1. Design residential streets for the minimum required pavement width needed to support travel lanes; on-street parking; and emergency, maintenance, and service vehicle access. These widths should be based on traffic volume.

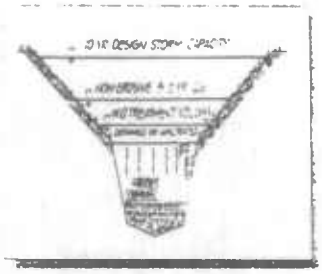
(Source: ULI, 1992)

2. Reduce the total length of residential streets by examining alternative street layouts to determine the best option for increasing the number of homes per unit length.



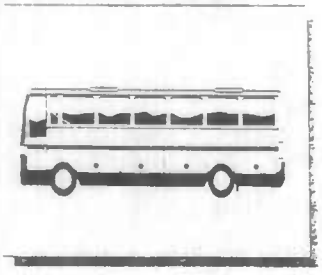
3. Wherever possible, residential street right-of-way widths should reflect the minimum required to accommodate the travel-way, the sidewalk, and vegetated open channels. Utilities and storm drains should be located within the pavement section of the right-of-way wherever feasible.

4. Minimize the number of residential street cul-de-sacs and incorporate landscaped areas to reduce their impervious cover. The radius of cul-de-sacs should be the minimum required to accommodate emergency and maintenance vehicles. Alternative turnarounds should be considered.



5. Where density, topography, soils, and slope permit, vegetated open channels should be used in the street right-of-way to convey and treat stormwater runoff.

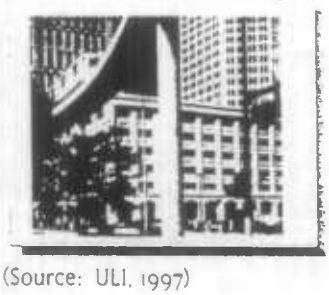
6. The required parking ratio governing a particular land use or activity should be enforced as both a maximum and a minimum in order to curb excess parking space construction. Existing parking ratios should be reviewed for conformance taking into account local and national experience to see if lower ratios are warranted and feasible.



7. Parking codes should be revised to lower parking requirements where mass transit is available or enforceable shared parking arrangements are made.

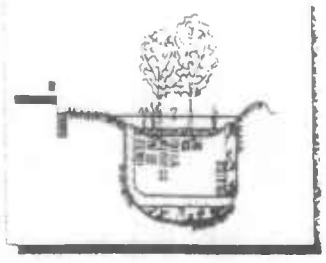
(Source: Wells, 1995)

8. Reduce the overall imperviousness associated with parking lots by providing compact car spaces, minimizing stall dimensions, incorporating efficient parking lanes, and using pervious materials in the spillover parking areas.



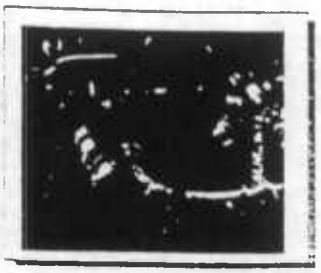
(Source: ULI, 1997)

9. Provide meaningful incentives to encourage structured and shared parking to make it more economically viable.



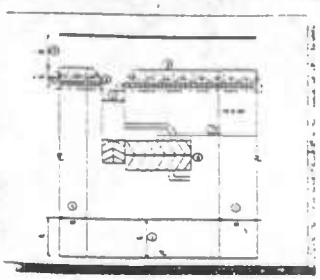
10. Wherever possible, provide stormwater treatment for parking lot runoff using bioretention areas, filter strips, and/or other practices that can be integrated into required landscaping areas and traffic islands.

Lot Development
(Habitat for People)

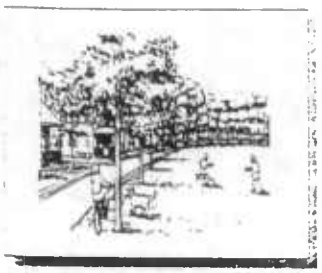


(Photo Courtesy of Randall Arendt)

11. Advocate open space development that incorporates smaller lot sizes to minimize total impervious area, reduce total construction costs, conserve natural areas, provide community recreational space, and promote watershed protection.

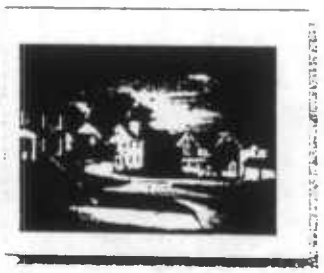


12. Relax side yard setbacks and allow narrower frontages to reduce total road length in the community and overall site imperviousness. Relax front setback requirements to minimize driveway lengths and reduce overall lot imperviousness.

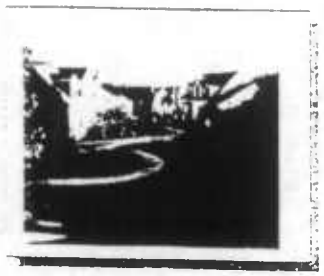


(Source: Arendt, 1994)

13. Promote more flexible design standards for residential subdivision sidewalks. Where practical, consider locating sidewalks on only one side of the street and providing common walkways linking pedestrian areas.



14. Reduce overall lot imperviousness by promoting alternative driveway surfaces and shared driveways that connect two or more homes together.



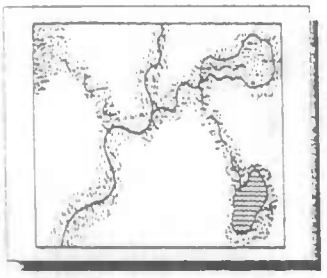
15. Clearly specify how community open space will be managed and designate a sustainable legal entity responsible for managing both natural and recreational open space.

16. Direct rooftop runoff to pervious areas such as yards, open channels, or vegetated areas and avoid routing rooftop runoff to the roadway and the stormwater conveyance system.

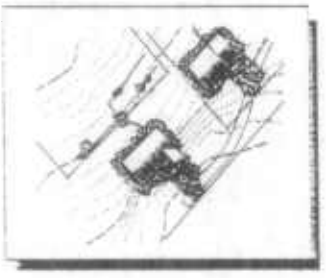
Conservation of Natural Areas

(Habitat for Nature)

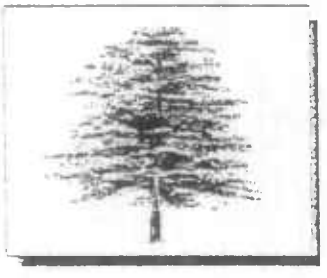
17. Create a variable width, naturally vegetated buffer system along all perennial streams that also encompasses critical environmental features such as the 100-year floodplain, steep slopes and freshwater wetlands.



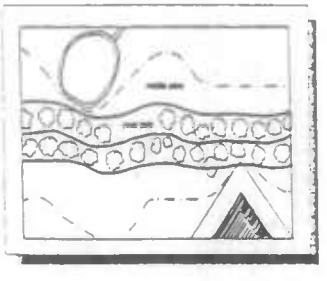
18. The riparian stream buffer should be preserved or restored with native vegetation that can be maintained throughout the plan review, delineation, construction, and occupancy stages of development.



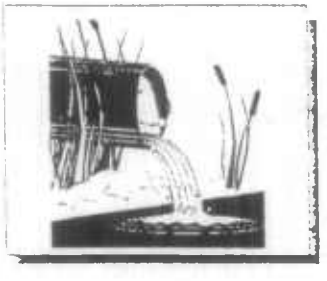
19. Clearing and grading of forests and native vegetation at a site should be limited to the minimum amount needed to build lots, allow access, and provide fire protection. A fixed portion of any community open space should be managed as protected green space in a consolidated manner.



20. Conserve trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native plants. Wherever practical, manage community open space, street rights-of-way, parking lot islands, and other landscaped areas to promote natural vegetation.



21. Incentives and flexibility in the form of density compensation, buffer averaging, property tax reduction, stormwater credits, and by-right open space development should be encouraged to promote conservation of stream buffers, forests, meadows, and other areas of environmental value. In addition, off-site mitigation consistent with locally adopted watershed plans should be encouraged.



22. New stormwater outfalls should not discharge unmanaged stormwater into jurisdictional wetlands, sole-source aquifers, or other water bodies.

APPENDIX C

SITE DESIGN GUIDELINES

The ***Site Design Guidelines*** provide guidance on how to achieve the greatest possible protection and conservation of FIDS habitat when development is proposed. The guidelines are recommended to be followed in order to minimize the impacts to interior forest habitat.

1. Restrict development to non-forested areas.

2. If forest loss or disturbance is unavoidable, concentrate or restrict development to the following areas:
   a. the perimeter of the forest (i.e., within 300 feet of the existing forest edge)
   b. thin strips of upland forest less than 300 feet wide
   c. small, isolated forests less than 50 acres in size
   d. portions of the forest with low quality FIDS habitat; e.g., areas that are already heavily fragmented, relatively young, exhibit low structural diversity, etc.

3. Maximize the amount of forest "interior" (forest area > 300 feet from the forest edge) within each forest tract (i.e., minimize the forest edge:area ratio). Circular forest tracts are ideal and square tracts are better than rectangular or long, linear forests.

4. Minimize forest isolation. Generally, forests that are adjacent, close to, or connected to other forests provide higher quality FIDS habitat than more isolated forests.

5. Limit forest removal to the "footprint" of houses and to that which is necessary for the placement of roads and driveways.

6. Minimize the number and length of driveways and roads.

7. Roads and driveways should be as narrow as possible; preferably less than 25 feet in width and 15 feet in width, respectively.

8. Maintain forest canopy closure over roads and driveways.

9. Maintain forest habitat up to the edges of roads and driveways; do not create or maintain mowed grassy berms.

10. Maintain or create wildlife corridors.

11. Do not remove or disturb forest habitat during April-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.

12. Landscape homes with native trees, shrubs and other plants and encourage homeowners to do so.

13. Encourage homeowners to keep pet cats indoors or, if taken outside, kept on a leash or inside a fenced area.

14. In forested areas reserved from development, promote the development of a diverse forest understory by removing livestock from forested areas and controlling white-tailed deer populations. Do not mow the forest understory or remove woody debris and snags.

15. Afforestation efforts should target a) riparian or streamside areas that lack woody vegetative buffers, b) forested riparian areas less than 300 feet wide, and c) gaps or peninsulas of non-forested habitat within or adjacent to existing FIDS habitat.

APPENDIX D

FIDS CONSERVATION WORKSHEET

Parcel size

_____ Total acreage
_____ Critical Area acreage

Existing

Forest cover _____ total contiguous acreage
Forest cover _____ total acres CA
FIDS habitat* _____ total acres CA
FIDS interior _____ acres CA
Calculate interior by subtracting out a 300 ft. edge. **

If available: _____ acreage of contiguous forest area both in an out of the CA within a 3-mile radius.

Post development

Forest cover _____total acres CA
FIDS habitat _____total acres CA
Interior habitat remaining_____acres CA
Interior habitat lost*** _____acres CA

***Pre-development FIDS interior acreage - post development FIDS interior acreage

***How to Identify FIDS Habitat**

Assume FIDS habitat is presumed present if a forest meets either of the following minimum conditions:

1. Forests at least 50 acres in size with 10 or more acres of "forest interior" (see below to calculate interior) habitat. The majority of the forest should be dominated by pole-sized or larger trees (5 inches or more in diameter at breast height), or have a closed canopy, or

2. Riparian forests at least 50 acres in size with an average total width of at least 300 feet. The stream within the riparian forest should be perennial, based on field surveys or as indicated on the most recent 7.5 minute USGS topographic maps. The majority of the forest tracts should be dominated by pole-sized or larger trees, or have a closed canopy.

In lieu of using the above criteria for determining if FIDS habitat is present, a FIDS survey may be done by a qualified FIDS observer. See page . of the Guidance Document for the procedures to be followed. You may contact the Maryland Department of Natural Resources, Forest Wildlife Divisions or the Critical Area Commission for a list of qualified observers.

****How to Measure the amount of forest interior and forest edge**

To determine the amount of interior in a forest, the "edge" of 300 feet is subtracted from the total contiguous forest. The area left is forest interior provided it is at least ten acres in size.

When measuring forest edge, do not include natural forest edges such as those adjacent to open water, nonforested wetlands, and streams. Riparian forests of 300 feet or greater are considered interior habitat when calculating FIDS habitat in the Critical Area, provided they have a minimum of 50 contiguous acres or are connected to forest that has been determined to be FIDS habitat.

Please answer the following questions regarding the FIDS *Site Design Guidelines* and how they were applied to the project.

1. Has development (e.g., house, septic reserve areas, driveway) been restricted to nonforested areas? Yes____ No____

   If no, explain _____

_____

2. If development has not been restricted to nonforested areas, has development been restricted to:

   a. perimeter of the forest (within 300 feet of the forest edge)? Yes___No____

   b. thin strips of upland forest less than 300 feet wide? Yes____No____

   c. isolated forests less than 50 acres in size? Yes____No____

   d. portions of the forest with low quality FIDS habitat; e.g. areas that are heavily fragmented, relatively young, exhibit low structural diversity, etc? Yes__No____

3. Have new lots been restricted to existing non-forested areas and/or forests as described in #2 above? Yes___No_____

   If no, please explain how property owners will be prevented from clearing in the FIDS habitat on their property(i.e. protective covenants/easements)?

   _____

   _____

4. Will forest removal be limited to the "footprint" of the house and that which will be necessary for the placement of roads and driveways? Yes___No____

5. Have the number and lengths of roads been minimized? Yes___No____

6. Have the width of roads and driveways been reduced to 25 feet and 15 feet respectively? Yes___No____
   If no, explain _____

_____

7. Will the forest canopy be maintained over roads and driveways? Yes__No___

8. Will the forest canopy be maintained up to the edge of roads and driveways? Yes___No___

9. Will at least 80% of the forest interior be maintained after development? Yes____No___

   If no, indicate percentage of forest interior that will be maintained? ____%

10. Are there special conditions on the site that limit where houses and other development activities may be located such as wetlands, steep slopes, etc.? If so please identify and explain.

_____

_____

11. Do you believe that the ***Site Design Guidelines*** have been followed and that FIDS habitat has been conserved on this site? Yes_____No____

MITIGATION REQUIREMENTS

If the *site design guidelines* <u>have</u> been followed the required mitigation will be the creation of FIDS habitat equal to the acreage being directly cut or disturbed. (See _____ for specific mitigation options and criteria.)

Enter acreage of FIDS habitat that is being directly impacted _____acres.
THIS IS YOUR MITIGATION REQUIREMENT WHEN THE SITE DESIGN GUIDELINES ARE FOLLOWED.

If the *site design guidelines* <u>have not</u> been followed complete the following.

A. Pre-development FIDS habitat ....._____ **acres.**
B. Post development FIDS habitat ..... _____ **acres.**

C. Pre-development FIDS habitat interior ..... _____ **acres.**
D. Post development FIDS habitat interior ..... _____ **acres.**

E. FIDS habitat being directly impacted..... _____ **acres.**
F. (Subtract B from A)

F. Interior lost due to development ..... _____**acres.**
(Subtract D from C)

G. Multiply F. times two (2) ____acres and add to E. = ____ acres.
THIS IS YOUR MITIGATION REQUIREMENT WHEN THE DEVELOPMENT GUIDELINES HAVE NOT BEEN MET.

APPENDIX E

RESOURCES FOR LOCATING MITIGATION SITES

In order to assist local jurisdictions in the implementation of the FIDS guidance and the recommendation that forest habitat mitigation be required whenever impacts to FIDS habitat take place onsite, the following state and local programs are outlined. Each of the following programs may be used by local governments, planning staff, landowners, and developers to identify appropriate mitigation sites for FIDS habitat planting and protection of existing FIDS habitat. The state Critical Area Staff are available to assist in the identification of the most appropriate program for meeting mitigation requirements.

The Green Infrastructure Network (MD Department of Natural Resources):

Using Geographic Information Systems principles and landscape ecology, the MD DNR has mapped an interconnected network of natural lands across the state described as "hubs" and "corridors" that are prioritized for conservation and restoration activities based on their ecological significance (e.g., large contiguous areas of forest, sensitive species, important wetlands or stream, etc.) and the level of threat (e.g., protection status, development pressures, etc.). The goal of the Green Infrastructure Assessment is to help identify an ecologically sound open space network, and ultimately, to incorporate this valuable network into state and local land conservation planning efforts.

Green Infrastructure areas have been identified on public and private lands throughout the state through a series of maps and a database developed by the DNR. Because only limited statewide data is available to define this network, the help of local governments, land trusts, citizens and scientific experts is needed in this cooperative endeavor to further refine and identify the Green Infrastructure land network and effectively incorporate this information into state and local planning efforts.

The purpose of the Green Infrastructure land network is to create a coordinated statewide approach to land conservation and restoration that will identify and protect lands with important ecological and biodiversity characteristics; address problems of forest fragmentation, habitat degradation and water quality; maximize the influence and effectiveness of public and private land conservation investment; promote shared responsibility for land conservation between public and private sectors; and guide and encourage compatible uses and land management practices.

In addition, the Green Infrastructure land network could be used by local governments or developers to identify areas where FIDS mitigation, either habitat creation or protection, will achieve the goal of creating or enhancing viable FIDS habitat and be the most valuable. When refined on the local level, the Green Infrastructure Assessment may be useful in assessing the potential natural resource related impacts of a proposed development and in identifying opportunities for natural resource and habitat enhancement activities.

The hub and corridor information and maps that have been developed at the state and regional level will be available to local governments and can be used to identify target areas that may be best, suitable for targeting FIDS mitigation.

Contact information:
Ms. Teresa Moore, Executive Director
Maryland Greenways Commission
Chesapeake Coastal and Watershed Service
Tawes State Office Building, E-2
Annapolis< MD 21401
(410) 260-8780
fax (410) 260-8709

Rural Legacy

The mission of the Rural Legacy Program is to protect regions rich in a multiple of agricultural, forestry, natural and cultural resources that, if conserved, will promote resource based economies, protect green belts and greenways, and maintain the fabric of rural life. The Rural Legacy Program provides the focus and funding necessary to protect large contiguous tracts of land and other strategic areas form sprawl development, and enhance natural resource, agricultural, forestry and environmental protection through cooperative efforts among State and local governments and land trusts. Protection is provided through the acquisition of easements and fee estates from willing landowners, and the supporting activities of Rural Legacy Sponsors and governments.

Application for Rural Legacy Program grants may be made by a Sponsor (defined as on eor more local governments, or land trusts endorsed by local governments) to the Rural Legacy Board. The applications include a description of the area, an identification of existing protected lands and the anticipated level of initial landowner participation in the program, a Rural Legacy Plan complying with the Rural Legacy criteria, and a proposed grant amount.

Contact:
Rural Legacy Program: (410) 260-8403 or
Program Open Space
MD Department of Natural Resources, E-4
580 Taylor Avenue
Annapolis, MD 21401

Critical Area Forest or FIDS Mitigation and the Conservation Reserve Enhancement Program (CREP):

In some counties, fee-in-lieu monies could be used to plant trees and purchase easements in conjunction with the U.S. Department of Agriculture Conservation Reserve Enhancement Program (CREP). CREP is a nationwide program that promotes the planting of streamside buffers and the restoration of wetlands on agricultural land by offering financial incentives to landowners who voluntarily remove land from agricultural production for a period of 10-15 years. A recent component of this program is also the purchase of perpetual easements on qualifying lands. This is where the greatest potential exists for CREP and Critical Area to combine forces to create and protect FIDS habitat. CREP will only pay for the first 150 feet adjacent to a waterbody. An area planted with Critical Area monies would be located landward of the 150-foot CREP forested buffer.

Planting Forested Buffers

The benefits offered to property owners would match the CREP bonus payments and cost-share. An area planted with Critical Area monies would be located landward of the 150-foot CREP forested buffer. Both the CREP and the Critical Area portions would be put in a perpetual easement to be held and enforced by the local Soil Conservation District (SCD), local land trust, or DNR. The benefits to the local Critical Area Programs include:

- The identification of forest/FIDS mitigation sites in the Critical Area to fulfill mitigation requirements and ensure no net loss of forest.
- Monitoring and enforcement of the mitigation sites would be in the hands of the Soil Conservation District, land trusts, or DNR, taking some burden off of the counties and helping to ensure that the trees are planted and survive.

Purchase of Easements on Existing Forest

Fees in lieu above the 1:1 mitigation ratio can be used for creative projects that help to restore/protect habitat and water quality. The monies could be used to purchase easements on forested areas in the Critical Area that are contiguous or near a CREP easement site.

Process

Some county planners are looking for ways to spend fees in lieu money. Local landowners may be interested in planting more acreage than is provided under CREP. In order to merge these two interests, local planners need to maintain communication with the Soil Conservation District and local land trusts so that interested landowners can take advantage of this additional funding source.

Maryland Local Land Trusts

Name	Organization	Address	Daytime Phone	Fax
Corkern, Wilton	Accokeek Foundation	3400 Bryant Point Road., Accokeek, MD 20627	301-283-2113	301-283-2049
Niland, Peg	American Chestnut Land Trust	Box 204, Port Republic, MD 20676	410-586-1570	410-586-0468
Biba, Frank	Annapolis Conservancy Board	160 Duke of Gloucester St., Annapolis, MD 21401	410-263-7949	-----
McWilliams, Jane	Bay Ridge Trust	15 Mayo Ave., Annapolis, MD 21403	410-268-2579(H)	410-268-7127
Calhoun, Frank	Broad Creek Conservancy	10511 Livingston Road, Broad Creek, MD 20744	410-292-2005	-----
Crane, John	Calvert Farmland Trust	1470 Turner Road, Lusby, MD 20657	410-586-8557	-----
V. David Grayson	Carroll County Land Trust	P.O. Box 2137, Westminster, MD 21157	410-848-9172	-----
Powell, Bill	Carroll County Dept. of Planning	225 North Center Street, Westminster, MD 21157	410-857-2132	410-848-0003
Kolkin, Mitch	Caves Valley Land Trust	2522 Caves Road, Owings Mills, MD 21117	410-244-7656	410-224-7742
Kilby, Bill	Cecil Land Trust	P.O. Box 1744, Elkton MD21921	410-658-6186	-----
Brigham, George	Central Maryland Heritage League	P.O. Box 721, Middelton, MD 21769	301-371-7090	-----
Mills, Vivian	Conservancy for Charles County	1170 Overlook, Accokeek, MD 20607	301-283-2410	301-283-4354
Mathes, Ruth	Cove Point Natural Heritage Trust	18-T Ridge Road, Greenbelt, MD 20770	301-345-6390	301-345-6390
Etgen, Rob	Eastern Shore Land Conservancy	P.O. Box 169, Queenstown, MD 21658	410-827-9756	410-827-9039
Smith, Lee	Franklintown Land Trust	5100 Maple Park Avenue, Baltimore, MD 21207	410-448-0779	-----
Chirtea, John	Greater Sandy Spring Green Space	20120 New Hampshire Avenue, Brinklow MD 20862	301-774-6135	-----
Carmody, Neil	Gunpowder Valley Conservancy	16940 York Rd Suite 201, Monkton MD 21111	410-329-8074	-----
Miller, David	Harford Land Trust	P.O. Box 385, Chruchville, MD 21028	410-836-2103	410-836-2103
Rosa, Paul	Harpers Ferry Conservancy	P.O. Box 1350, Harpers Ferry WV 25425	304-535-9961	304-535-9962
Stoffel, Elizabeth	Howard Co Conservancy	P.O. Box 175, Woodstock MD 21163-0175	410-465-8877	-----
Wikes, Helen	Kensington Land Trust	P.O. Box 602, Kensington, MD 20895	301-933-8756	-----
Kennedy, George	Kent I. Land & Tidewater Conserv.	1602 Ridge Road, Catonsville, MD 21228	410-788-7565	410-788-3223
Dillon, Jack	Valleys Planning Council/LPTrust	P.O. Box 5402, Towson, MD 21285	410-337-6877	410-296-5409
Ebert, Cathy	Long Green Valley Conservancy	12815 Kanes Road, Glen Arm, MD 21057	410-592-2381	-----
Lambert, Abigail	Lower Shore Land Trust	213 Downtown Plaza, Ste 305, Salisbury, MD 21801	410-341-6575	-----
Bender, Melvin	Magothy River Land Trust	P.O. Box 126, Severna Park, MD 21148	410-233-1660	410-945-7245

Constable, James	Manor Conservancy	P.O. Box 448 Monkton, MD 21111	410-659-1315	410-659-1350
Womersley, Mick	Maryland Mountain Trust	1517 Pea Ridge Road, Lanaconing, MD 21539	301-689-8134	-----
Nichols, Andy	Monocacy Watershed Conservancy	P.O. Box 4253, Frederick, MD 21701	301-663-9303	410-663-3929
Fishman, Sara	Mt. Washington Preservation Trust	1807 South Road, Baltimore, MD 21209	410-466-4270	-----
Puzio, Ray	Patuxent Watershed Land Trust	8508 Timber Pine Court, Ellicott City MD 21043	410-418-5222	-----
Conrad, Jim	Patuxent River Tidewater Land Trust	43223 Oakway Rd, Leonardtown, MD 20650	301-475-1795	-----
Logan, Matthew	Potomac Conservancy	4022 Hummer Rd, Annandale VA 22003	703-642-9880	703-642-9881
Odgers, Jim	Plum Point Environmental Land Trust	2705 Ridge Road, Huntingtown, MD 20639	301-925-9449	301-925-9450
Chalmers, Burnet	Rockburn Land Trust	6565 Belmont Woods Road, Elkridge, MD 21227	410-467-7774	410-467-0256
Clemens, Tom	Save Historic Antietam Foundation	P.O. Box 550, Sharpsburg, MD 21782	301-790-2800x298	301-739-0737
Eileen O'Brien	Severn River Land Trust	Po Box 2008, Annapolis MD 21404-2008	410-923-8800	410-923-0722
McHenry, Mary	South County Conservation Trust	P.O. Box 82, Churchton, MD 20733	410-867-1756	-----
Gilligan, Paul	South Mountain Heritage Society	P.O. Box 509, Burkittsville, MD 21718	301-834-7851	301-834-6092
Webster, David	Stronghold Corporation	Dickerson, MD 20842	301-874-2024	-----
Martin, Robert	Tree-Land Foundation	P.O. Box 535, Myersville, MD 21773	301-663-1122	301-620-7910
Cooper, Pam	Western Shore Conservancy FPNA	2080 Church Road, Bowie MD 20721	301-390-0797	301-390-0797
Pearce, Dianne	Wildlife Land Trust/CWS	17308 Queen Anne's Bridge Rd., Bowie, MD 20716	301-390-7010	301-249-3511
Kerpelman, Leonard	Woodland Committee Land Trust	2403 W Rogers Ave Baltimore MD 21209	410-367-8855	-----

This page last updated on January 28, 2000.

Maryland Land Trusts

State, Regional and National Land Conservation Organizations with Projects or Activities in Maryland

Name	Organization	Address	Daytime Phone	Fax
Ed Thompson Ralph Grossi Jill Schwartz	American Farmland Trust	1200 18th St NW, Suite 800 Washington DC 20036	202-659-5170	202-659-8339
Dennis Frye	Association For the Preservation of Civil War Sites	11 Public Square, Suite 200 Hagerstown, MD 21740	301-665-1400	301-665-1416
Lee Epstein	Chesapeake Bay Foundation	162 Prince George's St. Annapolis MD 21401	410-268-8816	410-268-6687
Richard Pritzlaff	Chesapeake Wildlife Heritage	P.O. Box 1745 Easton, MD 21601	410-822-5100	410-822-4016
Andrews, Matt	Civil War Trust	2101 Wilson Blvd., Suite 1120 Arlington, VA 22201	1-800-CWTRUST	-----
O'Day, Jodi	The Conservation Fund	48 Maryland Ave, 4th Fl., Annapolis, MD 21401	410-280-0577	410-280-1824
John Kullberg	Humane Socitey of the U.S. Wildlife Land Trust	2100 L St. NW, Washington DC 20037	301-258-3636	301-258-9361
Warren Fisher	Isaak Walton League of America Maryland Division	707 Conservation Lane Gathersburg MD 20878	301-926-8713	-----
Jean Hocker Andy Zepp	Land Trust Alliance	1319 F St MW, Suite 501 Washington DC 20004	202-638-4725	202-638-4730
Paul Scheidt	Maryland Agricultural Land Preservation Foundation	50 Harry S. Truman Parkway Annapolis, MD 21403	410-841-5860	410-841-5914
John Bernstein	Maryland Environmental Trust	100 Community Place Crownsville, MD 21032	410-514-7900	410-514-7919
Bill Pencek	Maryland Historical Trust	100 Community Place Crownsville, MD 21032	410-514-7629	410-987-4071
Nat Williams	The Nature Conservancy	2 Wisconson Circle, Ste 300 Chevy Chase, MD 20815	301-656-8673	301-656-0460
Philip Wallis	Natural Lands Trust	1031 Palmers Mill Road Media, PA 19063	610-353-5587	610-353-0517
H. Grant Dehart	Program Open Space/Maryland DNR	Tawes Bldg, 580 Taylor Ave. Annapolis, MD 21401	410-260-8403	410-260-8404

Bob Williams	Trust for Appalachian Trail Lands	P.O. Box 807 Harper's Ferry, West Va. 25425	304-535-6331	304-535-2667
Debi Osborne Rodger Krussman	The Trust for Public Land	666 Pennsylvania Avenue, S.E., Suite 401 Washington DC, 20003	202-543-7552	202-544-4723
Julie Enger	The Trust for Pulic Land, MD Office	The Mill Center, 300 Chestnut Ave. #205 Baltimore MD 21211	301-405-6359	301-403-4675
Peter Brown	U. of Md, School of Public Affairs	2105 Morrill Hall College Park, MD 20742	301-405-6359	301-403-4675

In some jurisdictions, County planners are looking for ways to spend fees in lieu and forest mitigation money. Local landowners may be interested in planting more acreage than is provided under CREP. In order to merge these two interests, local planners can be contacted to see whether there is any money available for interested landowners.

1. Landowner contacts local NRCS/SCD office or works with a local land trust regarding CREP contract and easement.
2. Landowners interested in obtaining this additional funding should contact their County Critical Area planner to find out if there are any funds available.
3. If money is available and the landowner decides to utilize Critical Area money for tree planting and an easement, then the landowner would go through the normal easement process (negotiate easement lines with DNR staff, submit easement applicant via local partner, receive bonus payment from the Board of Public Works in conjunction with a check from the local government for tree planting and easement, easement is executed and recorded).
4. Long term monitoring and stewardship would be handled by DNR and a local partner (land trust, SCD).

Payments

For a County to combine FIDS mitigation with CREP funds, the fee-in-lieu amount required from those property owners that are not able to mitigate on site would have to be comparable to the rates paid out by the CREP program. CREP pays up to 100% of the cost of tree buffers in addition to a bonus payment for every acre of trees restored and placed under a permanent easement. The bonus payment ranges, based on the County, from $693 to $2,716 per acre.

Contacts

To learn more about the CREP program, landowners should contact their local Natural Resources Conservation Service (NRCS) office.

To learn more about easement options, contact Jeff Horan, Deputy Director of Forest, Wildlife and Heritage at the Maryland Department of Natural Resources. (410) 260-8590.

State Highway Administration -

A local government or a project applicant can contact the Maryland State Highway Administration (SHA) to see if they have information on sites within a particular watershed or county. They often will have property owner information for potential mitigation sites and knowledge on whether an owner is interested in selling or not. They will also sell any extra acreage from their own mitigation (usually wetland) sites, resulting from SHA project impacts. These sites will not always be forested, but in many cases they are.

Contact
Todd Nichols
phone: 410-545-8628
fax: 410-209-5003
e-mail: tnichols@sha.state.md.us

Maryland Land Trusts:

There are a number of active land trusts throughout the State of Maryland that use land conservation tools such as conservation easements and land purchase use to provide permanent protection for natural resources areas like large contiguous forest suitable for FIDS habitat. The following list of Maryland Local Land Trusts in the state is updated regularly by the Maryland Environmental Trust.

Contact:
Nick Williams, Local Land Trust Assist Coordinator
Maryland Environmental Trust
100 Community Place, First Floor
Crownsville, MD 21032
(410) 514-7907
Fax: (410) 514-7919

APPENDIX F

CONSERVATION EASEMENTS

For the purpose of protecting and maintaining FIDS habitat, conservation easements should meet the following minimum conditions:

* The agreement should be between the property owner (grantor) and the local government and/or a land conservancy group (grantees).
* Restrictions on the property include the loss of development rights for the construction of houses and other structures.
* New agricultural activities are prohibited. (i.e. clearing, draining, construction).
* Any harvesting of timber must be done under an approved Timber Harvest Management Plan that would include a review for impacts to FIDS habitat.
* Recreational activities may be allowed provided they do not alter the character of the forest and do not cause undue disturbance during the breeding season.
* The easement shall be created in perpetuity.

Conservation easements should be held by either a local government agency and/or a local land trust that is willing and able to monitor compliance with agreements. An ideal situation is for both a local government agency and local land trust to jointly hold an easement on a property and be responsible for its enforcement. Often local land trusts are better set up than government agencies to monitor the easements for which they are responsible. There are approximately 40 local land trusts in Maryland.

INFORMATION REQUIRED FOR MITIGATION SITE DEVELOPMENT PLAN

1. A brief description of mitigation requirements based on the associated development project and how the mitigation plan will meet these requirements.

2. A brief description of the FIDS habitat that is being impacted including acreage, amount of interior lost, dominant tree and shrub species, and aquatic and/or other features that help define habitat characteristics.

3. Include a site location map depicting the geographic relationship between the impact site and proposed mitigation site and a vicinity map of enough detail to locate the site for monitoring purposes.

4. Describe the existing land use and ownership, adjacent land use and position in the landscape in relation to other forest tracts.

5. Describe the proposed plant communities that will be created/protected. If creating FIDS habitat indicate if natural regeneration or plantings will be used.

6. If natural regeneration is proposed describe the likely seed source, any site or soil preparation that will be undertaken, control measures for invasive species, measures to protect from wildlife grazers, etc.

7. If planting, provide a list of trees and shrubs to be planted, planting densities, control measures for invasive species, measures to protect from wildlife grazers, and soil and or site preparations, watering regime, etc.

8. Provide assurance of the legal right to use the proposed property for mitigation (e.g. letter of intent, option to purchase, etc.)

9. Indicate who will be responsible for monitoring and a description of information that will be provided in the monitoring reports.

Chesapeake Bay Critical Area Commission

STAFF REPORT
March 1, 2000

APPLICANT:	Town of Perryville
PROPOSAL:	Program Refinement - Proposed Growth Allocation for the Firestone Property (parcel 1) 40 acres
COMMISSION ACTION:	Concurrence with Chairman's Determination
STAFF RECOMMENDATION:	Concurrence
STAFF:	Mary Ann Skilling
APPLICABLE LAW/ REGULATIONS:	COMAR 27.01.02.06 - Location and Extent of Future Intensely Developed and Limited Developed Areas.

Project Description

On February 1, 2000, the Cecil County Board of Commissioners voted to grant to the Town of Perryville the use of 40 acres of growth allocation to change the Chesapeake Bay Critical Area designation from LDA to IDA on the Firestone property. A public hearing was held before the Town Planning and Zoning Commission on Tuesday, February 22nd in Perryville to consider a request to change the critical area designation of forty (40) acres of the former Firestone property now owned by Occidental Chemical Corporation from Limited Development Area (LDA) to Intensely Developed Area (IDA) for use as a warehousing and distribution facility. A public hearing was also held to consider this same request by the Mayor and Commissioners of the Town of Perryville on Thursday February 24th.

According to a letter form the Mayor and Town Commissioners of Perryville, the Town's request for growth allocation is based on the following information:

1. Industrial use had been the predominant land use of this parcel.

2. The parcel is at least 20 acres in size and industrial uses are concentrated on this parcel.

3. Public water and sewer currently serve the parcel and has served the site prior to the adoption of the Chesapeake Bay Critical Area Program.

4. The Cecil County Comprehensive Plan recommends the encouragement of industrial development in and around the towns.

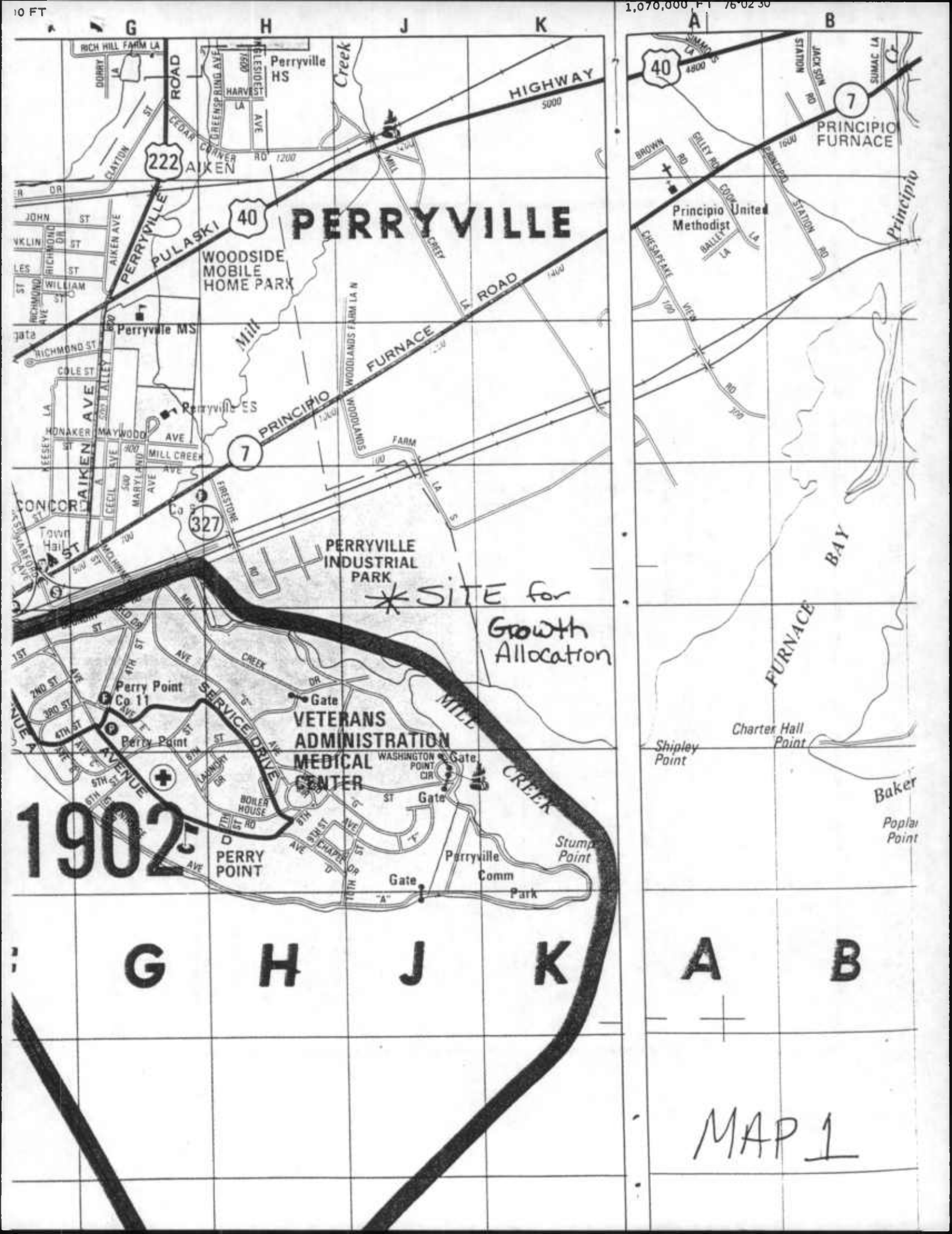
5. This parcel was located in the corporate limits of Perryville at the time that the Cecil County Critical Area Program was adopted.

6. It is the intent of the Cecil County Critical Area Program to ensure that the growth needs of the municipalities are addressed.

7. Designation of this parcel as an IDA would be compatible with the Town's Comprehensive Plan.

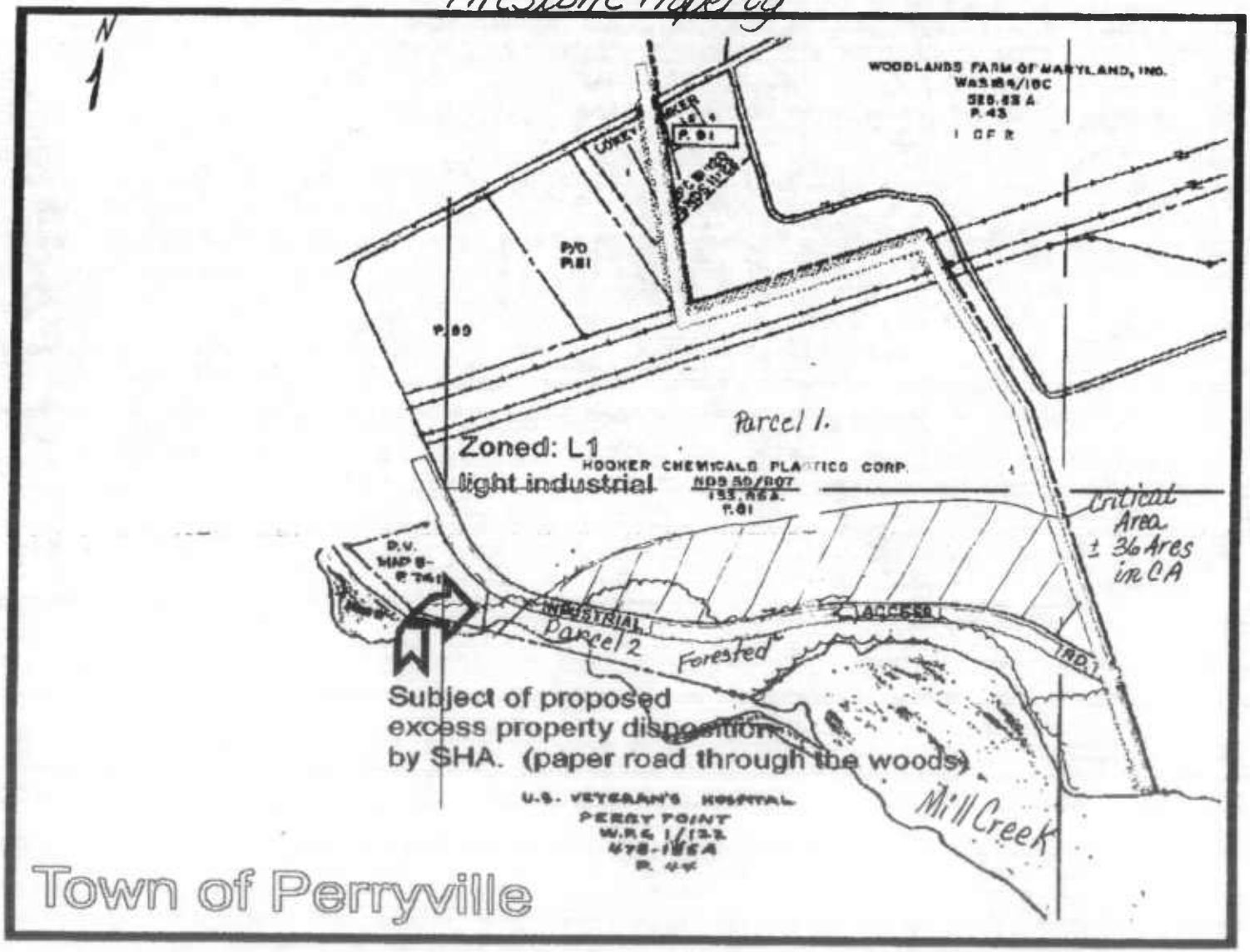
The Occidental Chemical Site consists of two parcels: Parcel 1 and Parcel 2. Parcel 2 is located along Mill Creek and is predominantly forested. Growth Allocation is not being requested for Parcel 2 at this time. (See attached Maps.)

The Chairman of the Critical Area Commission has determined that these changes constitute refinements to the Town of Perryville Critical Area Program and is seeking concurrence from the full Commission.


PERRYVILLE
WOODSIDE MOBILE HOME PARK
Perryville HS
Perryville MS
Perryville ES
PERRYVILLE INDUSTRIAL PARK
*SITE for Growth Allocation
VETERANS ADMINISTRATION MEDICAL CENTER
Perry Point Co 11
Perry Point
PERRY POINT
1902
Principio United Methodist
PRINCIPIO FURNACE
Shipley Point
Charter Hall Point
Stump Point
Baker
Poplar Point
Perryville Comm Park
HIGHWAY
PULASKI
PERRYVILLE ROAD
AIKEN
MILL CREEK
FURNACE BAY
MAP 1

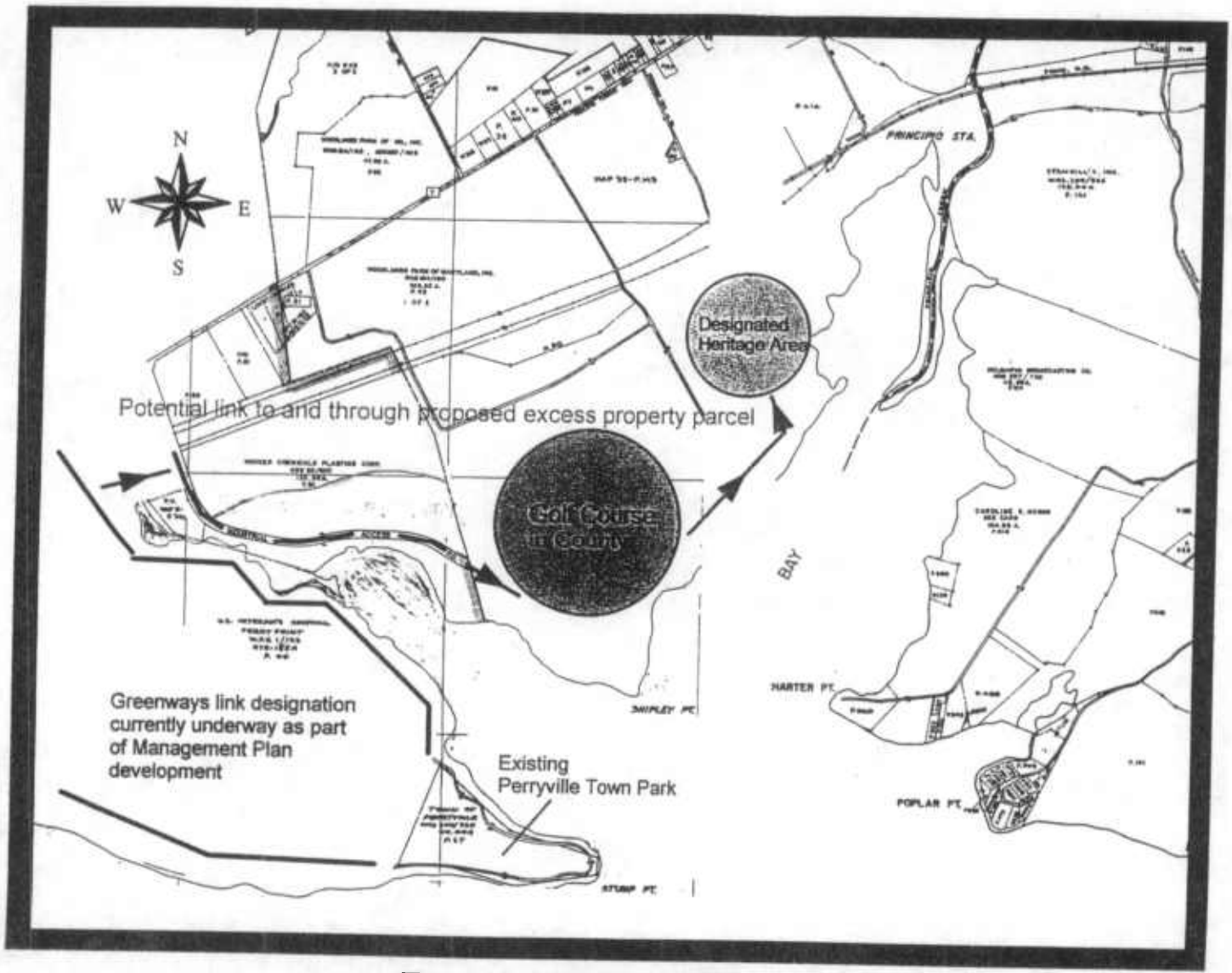
Proposed SHA Excess Property MD980708-0705

Firestone Property



MAP 2

PERRYVILLE GROWTH ALLOCATION
(40 Acres)



Regional Context

Site History: The property was purchased by Firestone Plastics in 1966. Firestone developed 43 of the 125.6 acres of land by constructing a PVC resin manufacturing facility and a compounding facility. Plant operations began in 1968 with the production of suspension resins and, in 1975, the plant was expanded to include emulsion resin production. In 1977, the compounding facility was closed. Occidental Chemical Corporation, formerly named Hooker Chemical, purchased the entire property in December 1980. All plant operations ceased in June, 1982.

Chesapeake Bay Critical Area Commission

STAFF REPORT
March 3, 2000

APPLICANT:	Queen Anne's County
PROPOSAL:	Program Refinement - Proposed Growth Allocation for the "Cox Creek Landing" subdivision
COMMISSION ACTION:	Concurrence with Chairman's Determination
STAFF RECOMMENDATION:	Concurrence
STAFF:	Susan M. Zankel
APPLICABLE LAW/ REGULATIONS:	COMAR 27.01.02.06 - Location and Extent of Future Intensely Developed and Limited Developed Areas.

Project Description
This Growth Allocation petition seeks to change the designation of a 22.33 acre parcel of land in the Critical Area designated as Resource Conservation Area (RCA) to Intensely Developed Area (IDA). The property is located on Thompson Creek Road and is identified as Lot Two of the Fair Prospect subdivision. (See attached Map 1 and Map 2) This redesignation is requested to facilitate development of the subject property with 51 residential lots, public roads, community open space, a boat and RV storage area and recreational amenities. The residential subdivision is proposed with the name of "Cox Creek Landing."

The Planning Commission approved the request for a favorable recommendation to the County Commissioners for conceptual approval of the Cox Creek Landing Growth Allocation Petition, subject to conditions identified in the Planning Department staff report. At their regularly scheduled meeting on February 1, 2000, the County Commissioners granted conceptual approval to the project and forwarded a request for Growth Allocation. The Planning and Zoning staff requests that the growth allocation be reviewed as a refinement.

Site Characteristics
In October 1998, Phase I of the Stevensville Community Plan was approved by the County. Lots One ("The Anchorage", a site recently approved for growth allocation) and Two (Cox Creek Landing) of Fair Prospect were specifically identified in the Stevensville Plan with a recommendation for future development of these properties.

> A planned, medium density residential development would be a more suitable land use designation for this area and would create a compatible transition between commercial development to the north and west, and residential development to the south. (Stevensville Community Plan)

The site is predominantly in an open field which is presently used for soybean cultivation. There is a hedgerow bisecting the southern third of the property, and a partially wooded shoreline Buffer. The site contains the following natural resource areas.

1. 2.292 acres of tidal wetlands. No disturbance to the area of tidal wetlands is proposed
2. 0.121 acres of non-tidal wetlands.
3. 1.510 acres of woodlands. The existing hedgerow is proposed for clearing, while additional tree planting is proposed in the 100' Buffer. These plantings are to satisfy outstanding afforestation obligations from the Fair Prospect subdivision action.

The community open space area encompasses the entire shore area and including the Buffer, however there are no impacts proposed at this time in the Buffer except those needed for access to the proposed community pier. The planned active recreation areas are located outside of the Buffer. All designated afforestation areas, all non-tidal wetlands and all of the 100-foot Buffer have been included in the community open space areas and have not been located on any individual lots.

A community pier is proposed. The number of boat slips which the pier is permitted to have will be based on the limits set out in the County's Critical Area program. The number of slips will be determined based on the number of lots permitted and the linear feet of shoreline at the preliminary subdivision stage and will depend on approvals from MDE and the Army Corps of Engineers.

According to the information presented, the petition qualifies as a refinement to the Queen Anne's County Critical Area map and program based on the following considerations.

- The property was rezoned SMPD to accommodate higher density development.
- The property is pre-mapped for growth allocation.
- The property is adjacent to existing IDA. The property immediately north of the site is proposed for development as a medium density residential subdivision, and is bordered by a strip shopping center and a mobile home park.
- There are no impacts proposed to Habitat Protection Areas.
- The property is to be connected to the existing public water and sewer system.

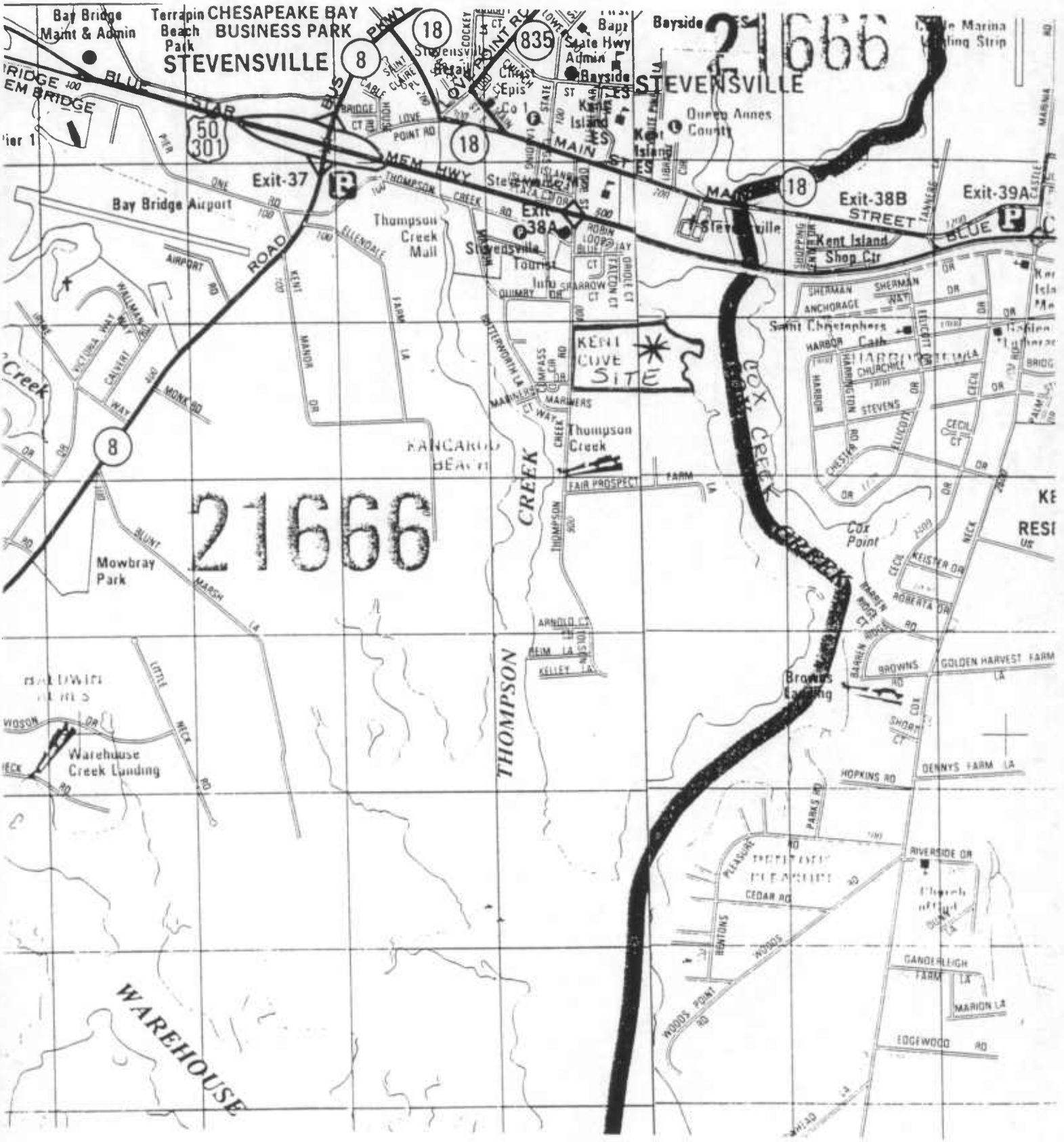
The minimum 100-foot Buffer, a naturally vegetated or vegetated area established or managed to protect aquatic, wetland shoreline, and terrestrial environments from man-made disturbances [County Code 14-111], will be established on the property and maintained in natural vegetation according to a Buffer Management Plan to be submitted to the CAC staff and County staff.

The Chairman of the Critical Area Commission has determined that these changes constitute refinements to the Queen Anne's County Critical Area Program and is seeking concurrence from the full Commission.

MAP I 5/3/00

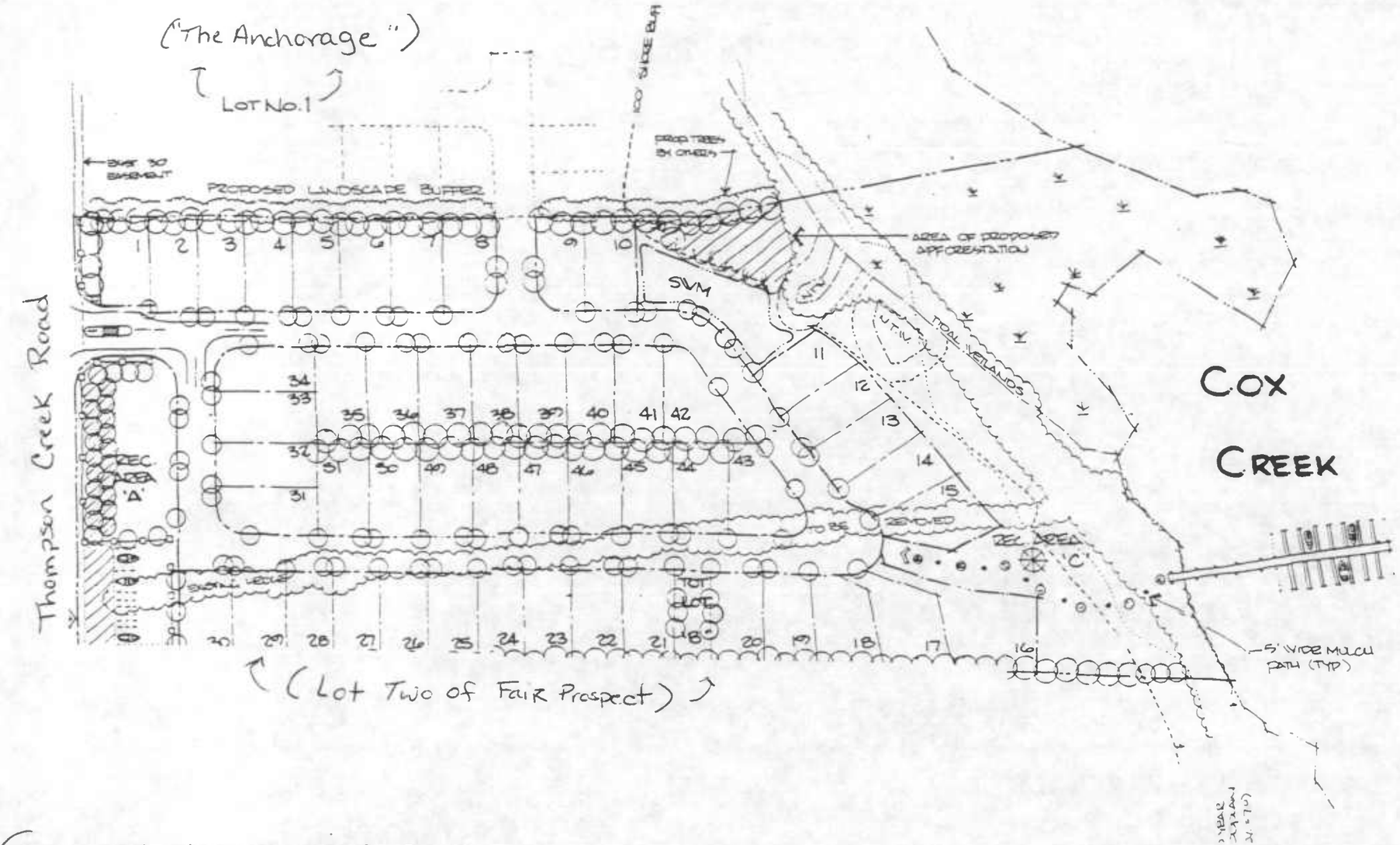
"Cox Creek Landing" Queen Anne's County

Proposed Growth Allocation



MAP 2

3/3/00



AFFORESTATION

- AFFORESTATION AREA SHOWN IS IN LIEU OF MITIGATION AREA SHOWN ON 'FAIR PROSPECT' SUBDIVISION PLAT FOR LOT #2.
  - REQUIRED: 208 LOBLOLLY PINE IN 11,800 SQ. FT. @ 7' O.C.
  - PROPOSED: 208 LOBLOLLY PINE IN 14,300 SQ. FT. @ 8' O.C.

  (PROPOSED PLANTS TO BE 8'-12' SEEDLINGS PER PLAT REQUIREMENTS.)

RECREATION AREAS

- AREA 'A':
  - 210' x 80' BALL FIELD
  - = 0.386 ACRES
- AREA 'B':
  - 50' x 130' TOT LOT W/ PLAY EQUIPMENT
  - = 0.149 ACRES
- AREA 'C':
  - 100' x 100' PICNIC & SOCIAL AREA W/ PICNIC TABLES & 14' DIA GAZEBO
  - = 0.230 ACRES

TOTAL ACTIVE RECREATION AREA
= 0.765 ACRES

GROWTH ALLOCATION PROPOSAL.

" Cox Creek Landing" Queen Annes County

Goodman · approves as proposed
Chair - Sec. 6/21

Chesapeake Bay Critical Area Commission

STAFF REPORT
March 1, 2000

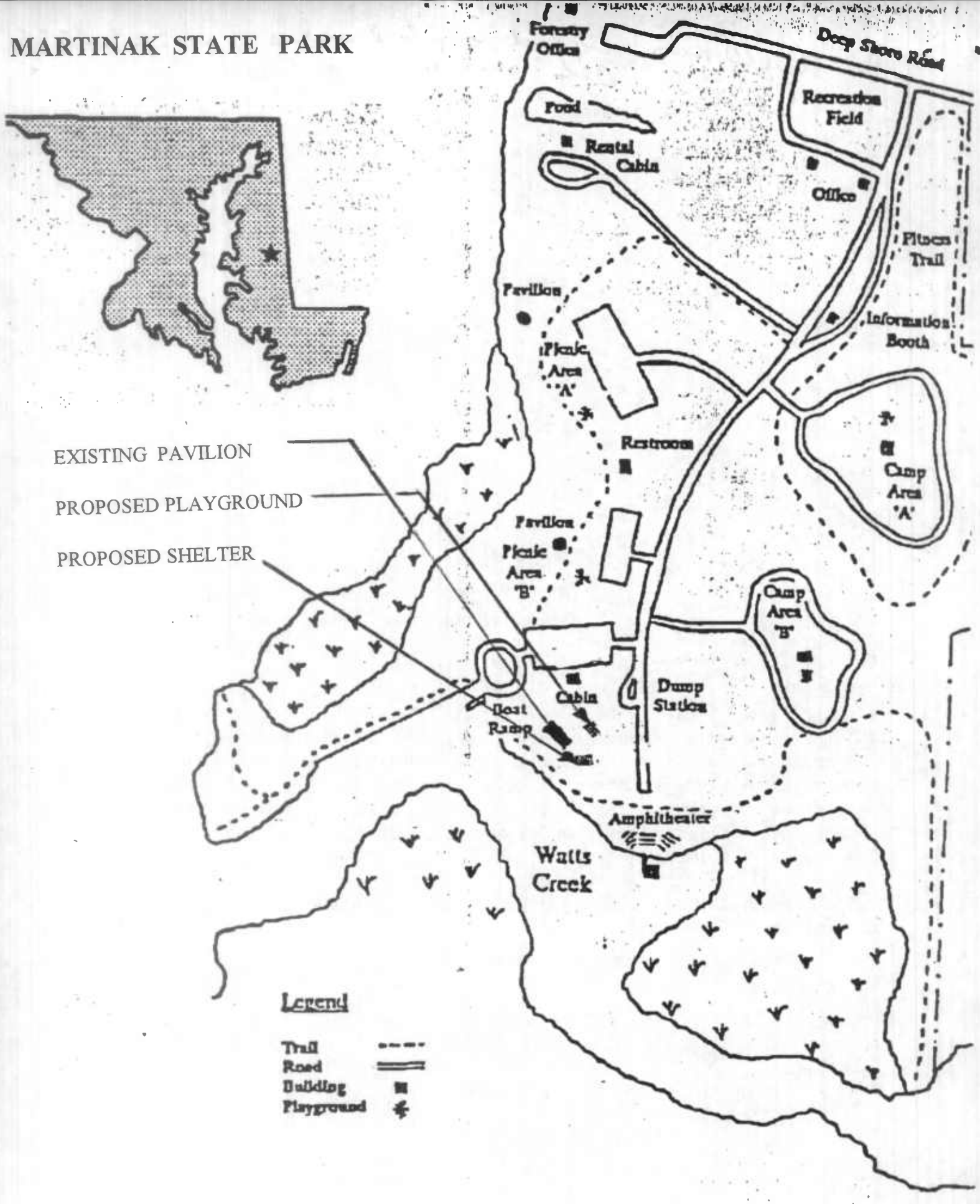
APPLICANT:	Department of Natural Resources
PROPOSAL:	Proposed Pavilion in Martinak State park
JURISDICTION:	Caroline County
COMMISSION ACTION:	Voted
STAFF RECOMMENDATION:	Approval
STAFF:	Dawnn McCleary
APPLICABLE LAW/ REGULATIONS:	**COMAR 27.02.05 - State Agency Actions Resulting in Development on State- Owned Lands**

DISCUSSION:

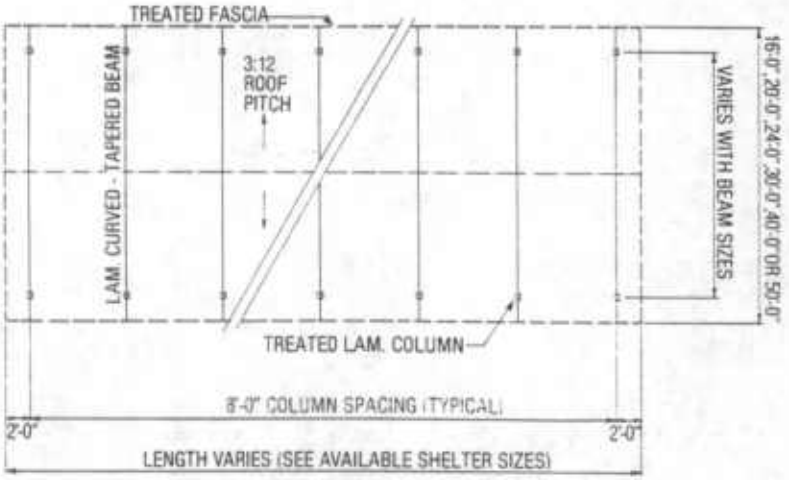
The Department of Natural Resources proposes to build a 20' x 65' (1,300 square feet) prefabricated wood picnic shelter. The proposed shelter will have a gravel floor and will be built in a cleared area approximately 300 feet from Watts Creek. The shelter will be used to place the remains of a historical ship within the Critical Area. Currently, the boat is housed in the pavilion at the Nature Center of the park. The limit of disturbance within the Critical Area will be approximately 1,300 square feet.

There will be no disturbance to the 100-foot Buffer. Also, there will be no clearing of forest for the proposed shelter. No threatened and endangered species are present in the area of the shelter.

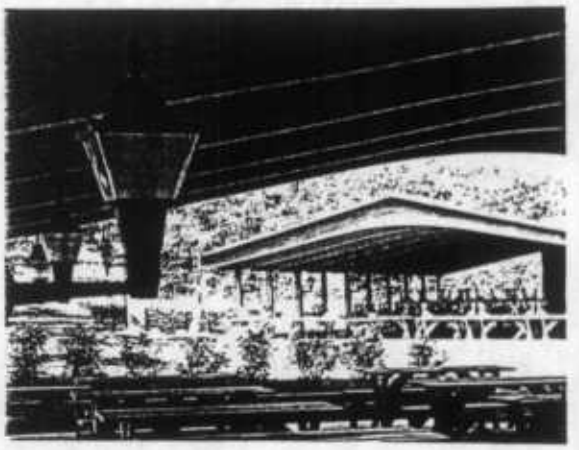
MARTINAK STATE PARK



The RALEIGH

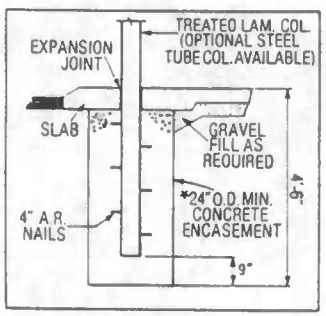


Roof Framing — Raleigh



Distinguished by its appealing laminated curved beams, the Raleigh shelter combines economy with versatility. It has been especially popular for municipal parks.

Note: The fireplace and lighting shown in the photograph is not included in this shelter package. Raceways in glulam columns are available as an option to assist in electrical wiring.



* 24" O.D. CONCRETE FOR 16', 20' AND 30'.

30" O.D. CONCRETE FOR 40' AND 50'.

Suggested Column Embedment

Standard Shelter Sizes Available:

16′ x 20′	24′ x 36′	40′ x 52′
16′ x 28′	24′ x 44′	40′ x 60′
16′ x 36′	24′ x 52′	40′ x 68′
20′ x 20′	30′ x 36′	40′ x 76′
20′ x 28′	30′ x 44′	50′ x 68′
20′ x 36′	30′ x 52′	50′ x 76′
20′ x 44′	30′ x 60′	50′ x 84′
20′ x 52′	30′ x 68′	50′ x 92′
24′ x 28′	30′ x 76′	50′ x 100′

Custom Sizes & Designs Available

Goodman - motion
Corkran - second C/2

Chesapeake Bay Critical Area Commission

STAFF REPORT
March 1, 2000

APPLICANT:	Maryland Department of Natural Resources
PROPOSAL:	Mini-cabins at the Shad Landing Area of Pocomoke River State Park
JURISDICTION:	Worcester County
COMMISSION ACTION:	Vote
STAFF RECOMMENDATION:	Approval
STAFF:	LeeAnne Chandler
APPLICABLE LAW/ REGULATIONS:	COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Lands

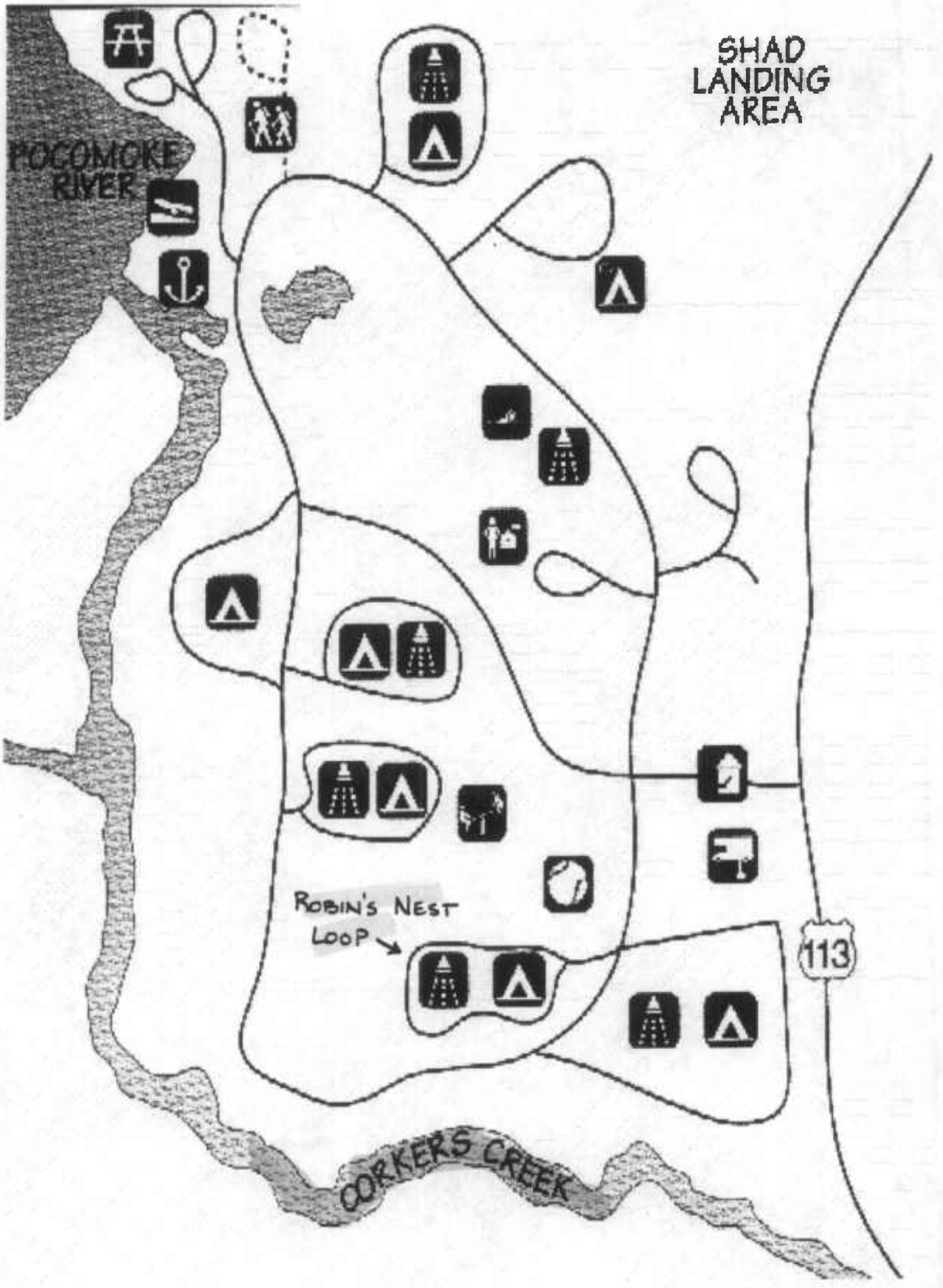
DISCUSSION:

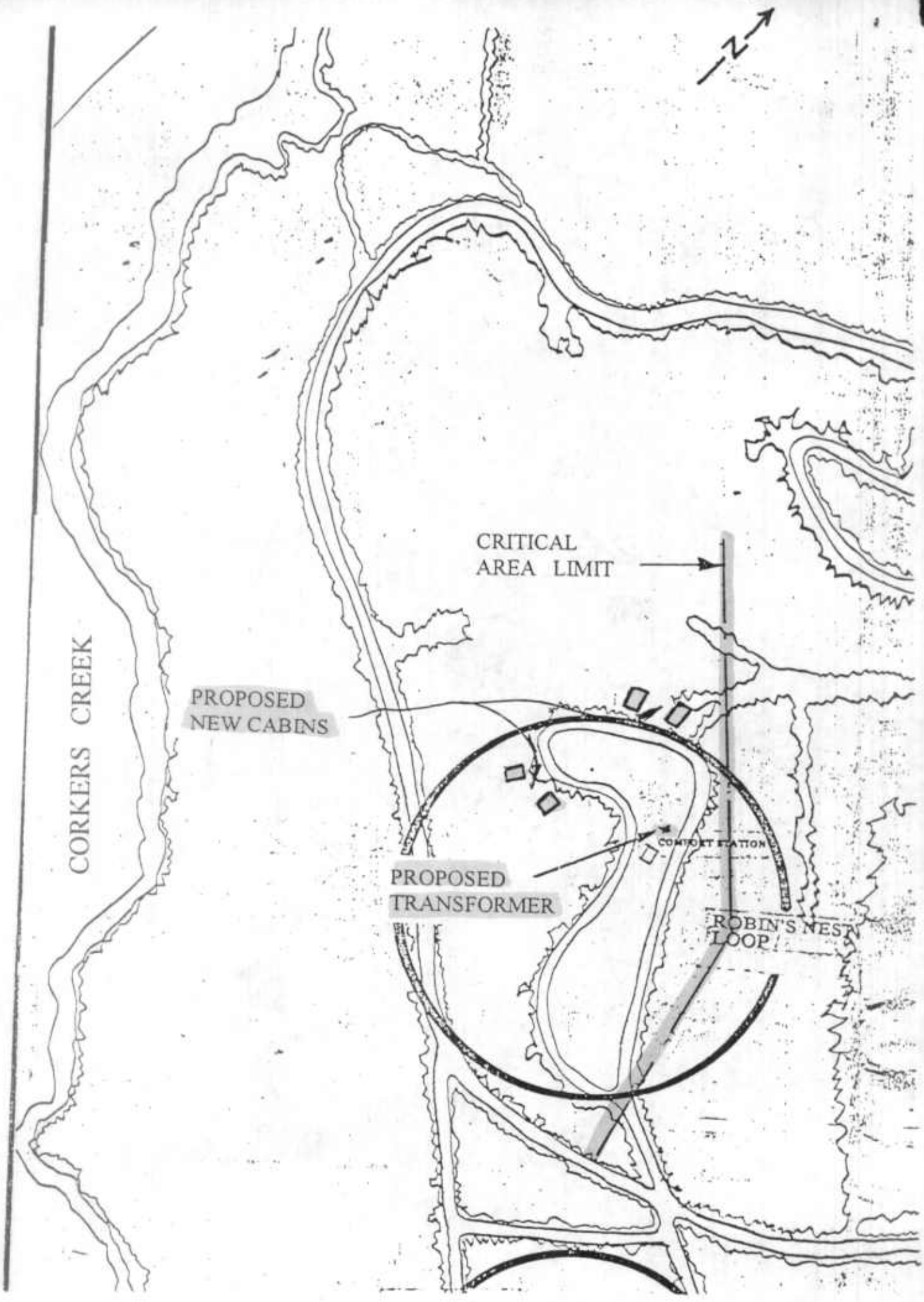
The Maryland Department of Natural Resources (DNR) is proposing to locate four mini-cabins at the "Robin's Nest" camp loop at the Shad Landing Area of Pocomoke River State Park. The cabins will be placed on existing stone dust camping pads located approximately 700 feet from Corkers Creek. The cabins are pre-fabricated and will be 13 feet by 15 feet in size with a 5 foot porch.

The proposed cabins will be served with electric power through underground electric lines stemming from a new transformer. An existing pole transformer will be removed from the project site. No vegetation or trees will be removed in the course of this project. The only ground disturbance will be installation of underground electric lines to serve each cabin. Areas that are disturbed will be immediately returned to their previous condition.

As stated above, the cabins will be placed on existing campsites along an established camping loop. There are no tidal or non-tidal wetlands in the immediate project area, nor are there any rare, threatened or endangered species. The opposite shore of Corkers Creek is part of the Mattaponi Natural Heritage Area (NHA). This NHA is approximately 1700 acres in size and it represents the northernmost extension of the original Great Dismal Swamp ecosystem. It supports numerous endangered and threatened species as well as at least 14 forest interior dwelling bird species. Given the existing camping activity at the Shad Landing Area, the proposed cabins will not negatively impact this Habitat Protection Area.

PROJECT - Mini-cabins at
Pocomoke River State Park




N
CRITICAL
AREA LIMIT
CORKERS CREEK
PROPOSED
NEW CABINS
COMFORT STATION
PROPOSED
TRANSFORMER
ROBIN'S NEST
LOOP

Goodman - prop. as presented
Van Lewen -
C/R

Chesapeake Bay Critical Area Commission

STAFF REPORT
March 1, 2000

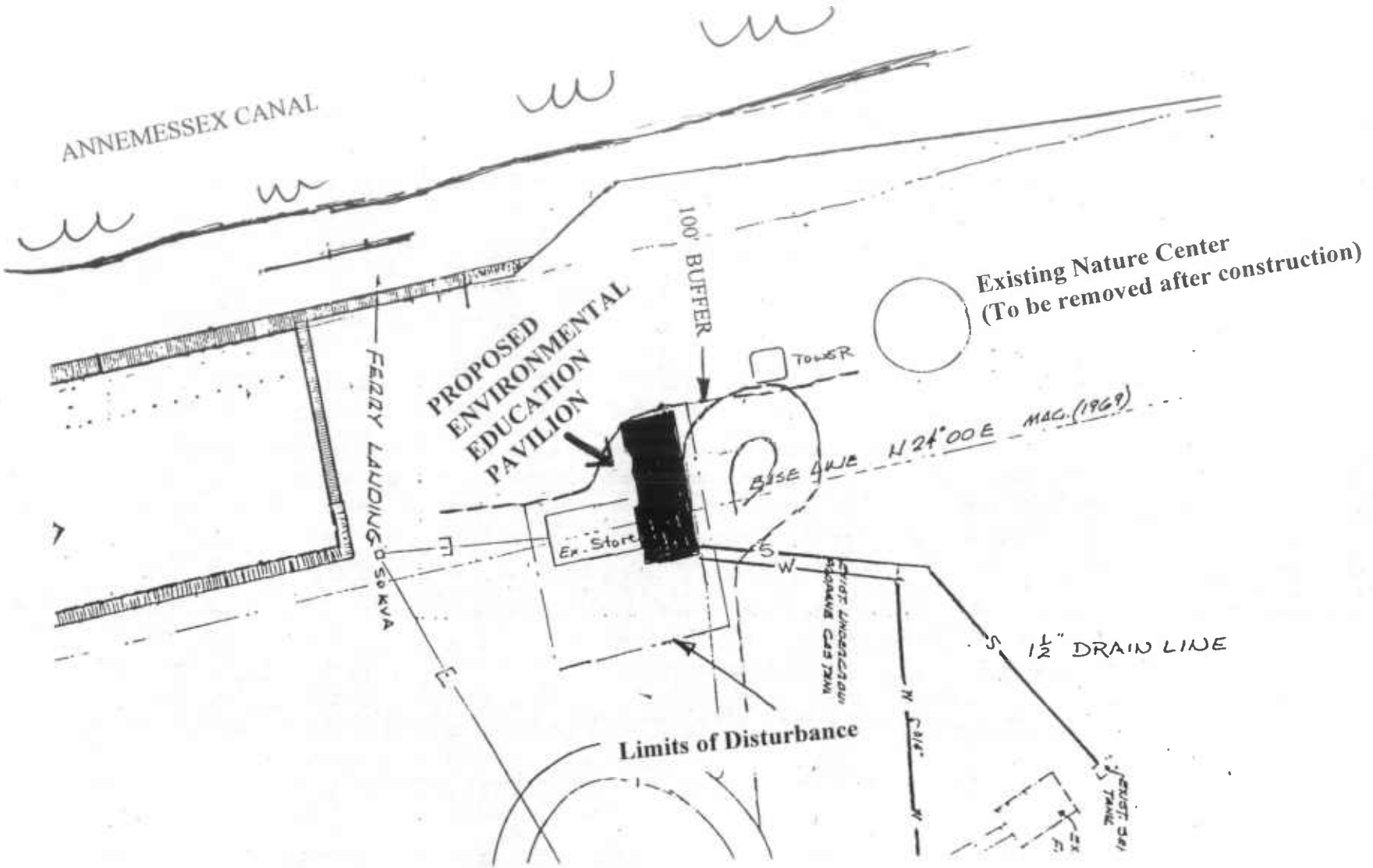
APPLICANT:	Maryland Department of Natural Resources
PROPOSAL:	Environmental Education Center at Janes Island State Park
JURISDICTION:	Somerset County
COMMISSION ACTION:	VOTE
STAFF RECOMMENDATION:	Approval
STAFF:	Regina Esslinger
APPLICABLE LAW/ REGULATIONS:	**COMAR 27.02.05 - *State Agency Actions Resulting in Development on State-Owned Lands***

DISCUSSION:

The Park is proposing to build a picnic shelter attached to an existing store that will be used as an environmental education center. This center will be used as a base location for programs associated with the Nature Tourism program and Bay related educational activities. This location has been chosen because of its proximity to the marsh and canoes that are associated with these educational activities. The existing nature center (approximately 2000 square feet) will be removed after construction of the new structure. The proposed structure is a 40' x 76' (3,040 square feet) prefabricated wood picnic shelter. The base is a layer of concrete that holds a series of wood columns to support the roof framing. The limits of disturbance will be approximately 9,000 square feet.

The site is 100 feet from Annemessex Creek in an area that is not in an area of intense development. There will be no disturbance to the 100-foot Buffer. The site is currently cleared, with some grass growing and no other vegetation. No threatened or endangered species are present on the site.

Janes Island State Park
Environmental Education Center/ Pavilion



Chesapeake Bay Critical Area Commission

STAFF REPORT
March 1, 2000

APPLICANT:	Maryland Department of Natural Resources
PROPOSAL:	Playground at Somers Cove Marina, Crisfield, MD
JURISDICTION:	City of Crisfield
COMMISSION ACTION:	VOTE
STAFF RECOMMENDATION:	Approval
STAFF:	Regina Esslinger
APPLICABLE LAW/ REGULATIONS:	**COMAR 27.02.06 - *Conditional Approval of State or Local Agency Programs in the Critical Area***

DISCUSSION:

Somers Cove Marina proposes to build a 40' x 65' (2,600 square feet) playground using a Fibar system floor that consists of wood chips. The proposed site is 65 feet from the edge of Somers Cove. The site is currently used as a volleyball area that is covered with sand. No new impervious surfaces are proposed. DNR will provide 3:1 mitigation for disturbance to the Buffer by native vegetation in the 100-foot Buffer. DNR staff is working with Commission staff to develop a planting plan.

Conditional Approval:

In order to qualify for consideration by the Commission for conditional approval, the Agency must show that the project has the following characteristics:

(1) That there exist special features of a site or there are other special circumstances such that literal enforcement of these regulations would prevent a project or program from being implemented;

Somers Cove Marina is an intensely developed marina with vast areas of impervious surfaces, including sidewalks, parking areas, recreational areas, and buildings. There are no alternative locations outside of the Buffer that are not already in use for parking or recreational purposes. For safety reasons, it made sense to propose this particular site so that children playing would be

away from the parking area. In addition, the site is already being used for a volleyball sand pit, therefore, a new area of grass would not have to be disturbed.

(2) That the project or program otherwise provides substantial public benefit to the Chesapeake Bay Critical Area Program;

DNR is working with Commission staff to develop a planting plan to mitigate the disturbance to the Buffer. In addition, DNR is developing planting plans for the entire marina that will include Bayscaping and replacing impervious surfaces with native vegetation and porous pavers.

(3) That the project or program is otherwise in conformance with this subtitle;

This project has already been approved under DNR's Clearinghouse Review process. The disturbance to the Buffer will be mitigated through plantings in conformance with a Planting Agreement to be developed with Commission Staff assistance. Staff finds this project to be otherwise consistent with the Critical Area Program.

The Commission must find that the conditional approval request contains the following:

(1) That a literal enforcement of the provision of this subtitle would prevent the conduct of an authorized State or local agency program or project;

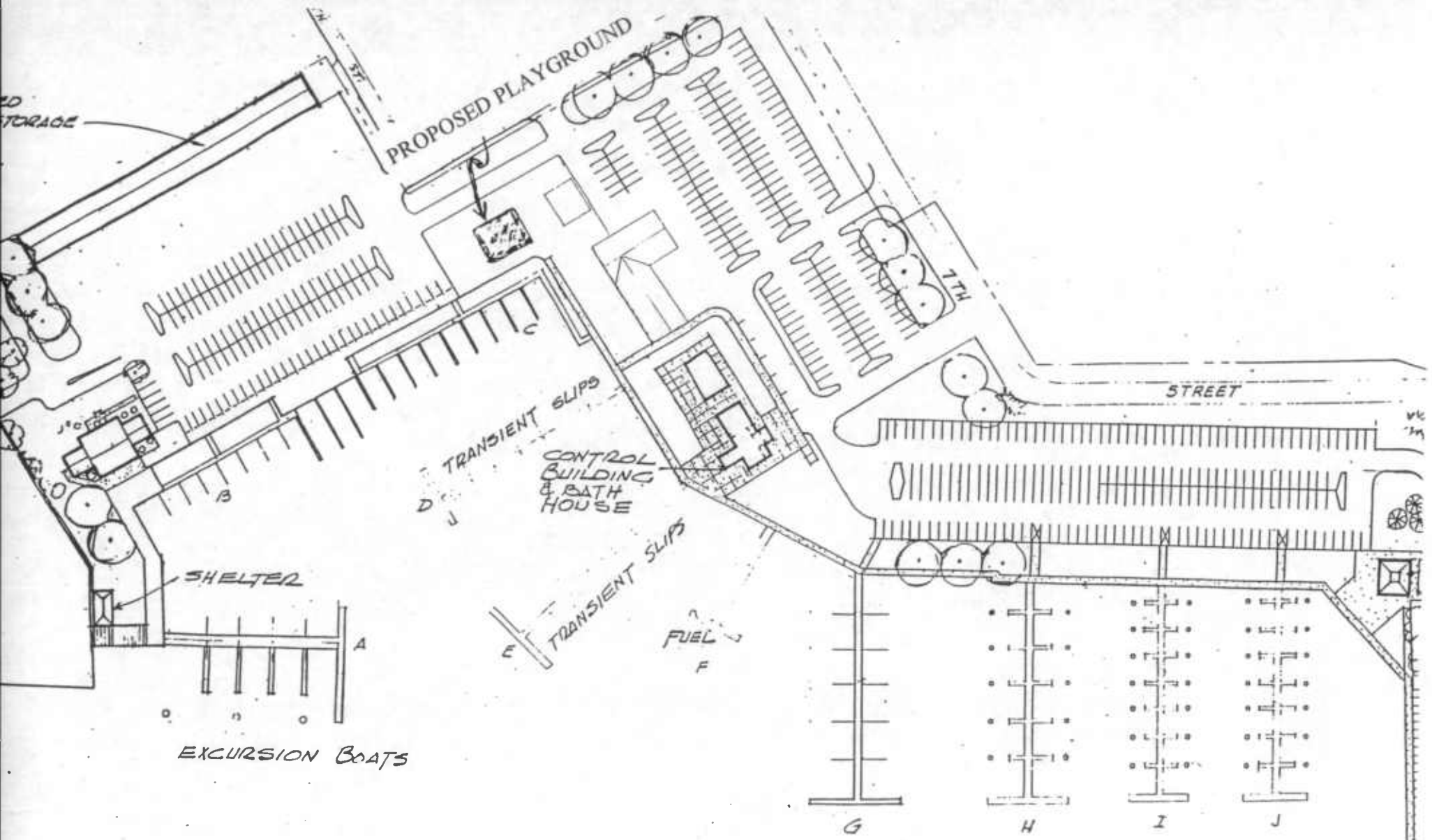
A literal enforcement of the provision would prevent the marina from providing public recreational facilities in close proximity to the water.

(2) There is a process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or, if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05; and

Staff has determined that the project complies with COMAR 27.02.05.09 insofar as possible. No impervious surfaces are proposed and the area that will be disturbed will be mitigated through native plantings. There will be no clearing or removal of existing vegetation, rather, an existing sand pit will be replaced with wood chips.

(3) Measures proposed to mitigate any adverse effects of the project or program on an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

Disturbance to the Buffer will Be mitigated through native vegetation planted within the 100-foot Buffer. DNR is working with Commission Staff to determine an appropriate planting plan that will provide water quality and habitat benefits. The plantings will result in enhanced water quality and habitat at this site.



DEPARTMENT OF NATURAL RESOURCES ENGINEERING & CONSTRUCTION	PLAYGROUND SITE SOMERS COVE MARINA SOMERSET COUNTY, MARYLAND FEBRUARY 2000

COUNTY COUNCIL

OF

TALBOT COUNTY, MARYLAND

1999 Legislative Session, Legislative Day No. November 9, 1999

Bill No. 741

Introduced by: County Council

A BILL TO REPEAL AND RE-ENACT SECTION 19.14(b)(7), TITLE 19. ZONING, OF THE TALBOT COUNTY CODE, WITH AMENDMENTS TO ALLOW THE BOARD OF APPEALS TO MAKE REASONABLE ACCOMMODATION FOR DISABLED CITIZENS, TO ESTABLISH CRITERIA FOR DOING SO, AND FOR LIMITING THE ENVIRONMENTAL IMPACT OF ANY SUCH ACCOMMODATION IN THE CRITICAL AREA.

By the Council November 9, 1999

Introduced, read first time, ordered posted and public hearing scheduled on Tuesday, November 23, 1999, at 2:15 p.m. in the Council Hearing Room, Courthouse, Easton, Maryland.

By Order Jessica Moms
Secretary

A BILL TO REPEAL AND RE-ENACT SECTION 19.14(b)(7), TITLE 19. ZONING, OF THE TALBOT COUNTY CODE, WITH AMENDMENTS TO ALLOW THE BOARD OF APPEALS TO MAKE REASONABLE ACCOMMODATION FOR DISABLED CITIZENS, TO ESTABLISH CRITERIA FOR DOING SO, AND FOR LIMITING THE ENVIRONMENTAL IMPACT OF ANY SUCH ACCOMMODATION IN THE CRITICAL AREA.

SECTION ONE: BE IT ENACTED by the County Council of Talbot County that Section 19.14(b)(7), Title 19. Zoning, of the Talbot County Code entitled "Reasonable Accommodation" shall be and is hereby repealed in its entirety and re-enacted as set forth herein.

(7) Reasonable Accommodation for the Needs of Disabled Citizens

(i) Purpose. Notwithstanding any other provision of this Ordinance, the Board of Appeals may make reasonable accommodations for the benefit of disabled citizens in the consideration of any final order or decision of the Planning Officer or any administrative appeal, special exception or variance. Reasonable accommodation for the needs of disabled citizens may be permitted in accordance with the evidentiary requirements set forth in paragraph (ii) of this Section. Reasonable accommodations may only be approved following a review and recommendation by the Planning Commission, and final approval and authorization after a public hearing before the Board of Appeals.

(ii) An applicant/appellant shall have the burden of demonstrating by a preponderance of the evidence that:

[a] The existence of a disability within the meaning of the Americans with Disabilities Act;

[b] Literal enforcement of the statute, ordinance, regulation, or other requirement would (1) result in discrimination by virtue of such disability or (2) deprive the applicant/appellant of the reasonable use and enjoyment of the property;

[c] A reasonable accommodation would reduce or eliminate the discriminatory effect of the statute, ordinance, regulation, or other requirement or restore the applicant/appellant's reasonable use or enjoyment of the property;

[d] The accommodation requested will not substantially impair the purpose, intent, or effect of the statute, ordinance, regulation or other requirement as applied to the property;

If the property is located in the critical area, the accommodation would:

[e] Be environmentally neutral with no greater negative impact on the environment than the literal enforcement of the statute, ordinance, regulation or other requirement; or

[f] Allow only the minimum environmental changes necessary to address the needs resulting from the particular disability of the applicant/appellant.

(iii) The Board of Appeals shall determine the nature and scope of any accommodation under this section and may award different or other relief than requested after giving due regard to:

[a] The purpose, intent, or effect of any applicable statute, regulation, or ordinance;

[b] The size, location, nature, and type of accommodation proposed and whether alternatives exist which accommodate the need with less adverse effect.

(iv) Upon termination of the need for any accommodation, the Board of Appeals may require, as a condition of approval, that the property be restored to comply with all applicable statures, ordinances, regulations, or other requirements.

(v) Hearing Notice. Public notice of all applications and hearings shall be given in accordance with Section 19.14(b)

(vi) Site Visit. A majority of the members of the Board of Appeals shall be required to visit the site before conducting the public hearing. However, the decision shall be based upon the evidence of record.

(vii) Recommendation of the Planning Commission. Before making a decision on any application or appeal, the Board of Appeals shall obtain the recommendation of the Planning Commission. The Planning Commission's recommendation shall address the criteria in paragraph (ii) in this Section. The recommendation shall be considered by the Board of Appeals, shall become part of the record, but shall not be binding on the Board of Appeals. The Board may request from the Planning Commission such technical service, data, or factual information as may further assist the Board of Appeals in reaching a decision.

(viii) New application after denial. Following the denial of a request for a reasonable accommodation, no application for the same use on the same premises shall be filed within one (1) year from the date of denial, except on grounds of newly discovered evidence.

SECTION TWO: BE IT FURTHER ENACTED by the County Council of Talbot County that Section 19.14(b) Power of Board of Appeals, Title 19. Zoning, of the Talbot County Code, is amended by changing subsection (6) to subsection (7) and subsection (7) to subsection (6).

SECTION THREE: BE IT FURTHER ENACTED by the County Council of Talbot County that this Bill shall take effect sixty (60) calendar days from the date of its passage.

HOUSE BILL 1323

Unofficial Copy
M1

2000 Regular Session
0lr2479

By: **Delegate Weir**
Introduced and read first time: February 21, 2000
Assigned to: Rules and Executive Nominations

A BILL ENTITLED

AN ACT concerning

Natural Resources - Critical Areas - Reasonable Accommodations

FOR the purpose of adding an element to the list of elements that are included in a local government's critical areas program; requiring the Chesapeake Bay Critical Area Commission to approve a local government's amendment that allows for reasonable accommodations to avoid discrimination on the basis of physical disability; and generally relating to the Critical Area Protection Program.

BY renumbering
Article - Natural Resources
Section 8-1809(k) through (s), respectively
to be Section 8-1809(l) through (t), respectively
Annotated Code of Maryland
(1990 Replacement Volume and 1999 Supplement)

BY repealing and reenacting, with amendments,
Article - Natural Resources
Section 8-1808(b) and 8-1809(j)
Annotated Code of Maryland
(1990 Replacement Volume and 1999 Supplement)

BY repealing and reenacting, without amendments,
Article - Natural Resources
Section 8-1809(h) and (i)
Annotated Code of Maryland
(1990 Replacement Volume and 1999 Supplement)

BY adding to
Article - Natural Resources
Section 8-1809(k)
Annotated Code of Maryland

(1990 Replacement Volume and 1999 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That Section(s) 8-1809(k) through (s), respectively, of Article - Natural Resources of the Annotated Code of Maryland be renumbered to be Section(s) 8-1809(l) through (t), respectively.

SECTION 2. AND BE IT FURTHER ENACTED, That the Laws of Maryland read as follows:

Article - Natural Resources

8-1808.

(b) A program shall consist of those elements which are necessary or appropriate:

(1) To minimize adverse impacts on water quality that result from pollutants that are discharged from structures or conveyances or that have run off from surrounding lands;

(2) To conserve fish, wildlife, and plant habitat; [and]

(3) To establish land use policies for development in the Chesapeake Bay Critical Area which accommodate growth and also address the fact that, even if pollution is controlled, the number, movement, and activities of persons in that area can create adverse environmental impacts; AND

(4) TO MAKE REASONABLE ACCOMMODATIONS IN POLICIES OR PROCEDURES WHEN THE ACCOMMODATIONS ARE NECESSARY TO AVOID DISCRIMINATION ON THE BASIS OF PHYSICAL DISABILITY.

8-1809.

(h) (1) As often as necessary but not more than 4 times per calendar year, each local jurisdiction may propose program amendments and program refinements to its adopted program.

(2) (i) Except for program amendments or program refinements developed during program review under subsection (g) of this section, a zoning map amendment may be granted by a local approving authority only on proof of a mistake in the existing zoning.

(ii) The requirement in paragraph (2)(i) of this subsection that a zoning map amendment may be granted only on proof of a mistake does not apply to proposed changes to a zoning map that:

1. Are wholly consistent with the land classifications in the adopted program; or

2. Propose the use of a part of the remaining growth allocation in accordance with the adopted program.

(i) A program may not be amended except with the approval of the Commission.

(j) The Commission shall approve programs and program amendments that meet:

(1) The standards set forth in § 8-1808(b)(1) through [(3)] (4) of this subtitle; and

(2) The criteria adopted by the Commission under § 8-1808 of this subtitle.

(K) THE COMMISSION SHALL APPROVE A PROGRAM AMENDMENT THAT ALLOWS FOR REASONABLE ACCOMMODATIONS IN POLICIES OR PROCEDURES IN ORDER TO AVOID DISCRIMINATION ON THE BASIS OF PHYSICAL DISABILITY UNLESS THE COMMISSION CAN DEMONSTRATE THAT THE AMENDMENT WOULD FUNDAMENTALLY ALTER THE NATURE OF THE PROGRAM.

SECTION 3. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2000.

23 March 2000

Dear Editor:

As proposals go forward for the replacement of the Woodrow Wilson Bridge, it is important that plans include a true solution to the region's No. 1 traffic nightmare: Metro rail (light or heavy) built at the Wilson Crossing now! Only with Metro rail will the new crossing have sufficient capacity to handle our 21st Century transportation needs.

Fast track planning and construction of the Metro "Purple Line" at this crossing can and should start now. Under the current bridge replacement proposal, Metro rail at this crossing and into Oxon Hill is not contemplated for another 25 years – denying the region transit-oriented development, which is at the heart of Smart Growth. The purple line is the best way to bring economic revitalization including upscale jobs, stores, and restaurants to the area, for the citizens of Prince George's County, because it would integrate Oxon Hill into the Washington metropolitan area on an equal footing.

The proposal to bring Metro rail across the Potomac between Alexandria and Oxon Hill NOW is a win-win solution. It would meet the needs of ALL stakeholders in this challenging situation: 1) transportation choices and economic redevelopment in southern Prince George's County, 2) smaller interchange footprint in Alexandria, with greater capacity, 3) potential access for the proposed National Harbor, and 4) positive cumulative environmental benefit for the Potomac River and surrounding communities. 5) a transportation solution for our National Capital region that is worthy of being held up as a model for smart transportation planning.

Congestion is the problem and metro is the answer.

SINCERELY,
Bonnie Bick
Oxon Hill, MD
301-839-7403